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THE AMERICAN ELEVATOR AND GRAIN TRADE

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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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Mitchell Brothers Publishing Co.

VOL. XXXI.

CHICAGO, ILLINOIS, JANUARY 15, 1913.

No. 7.

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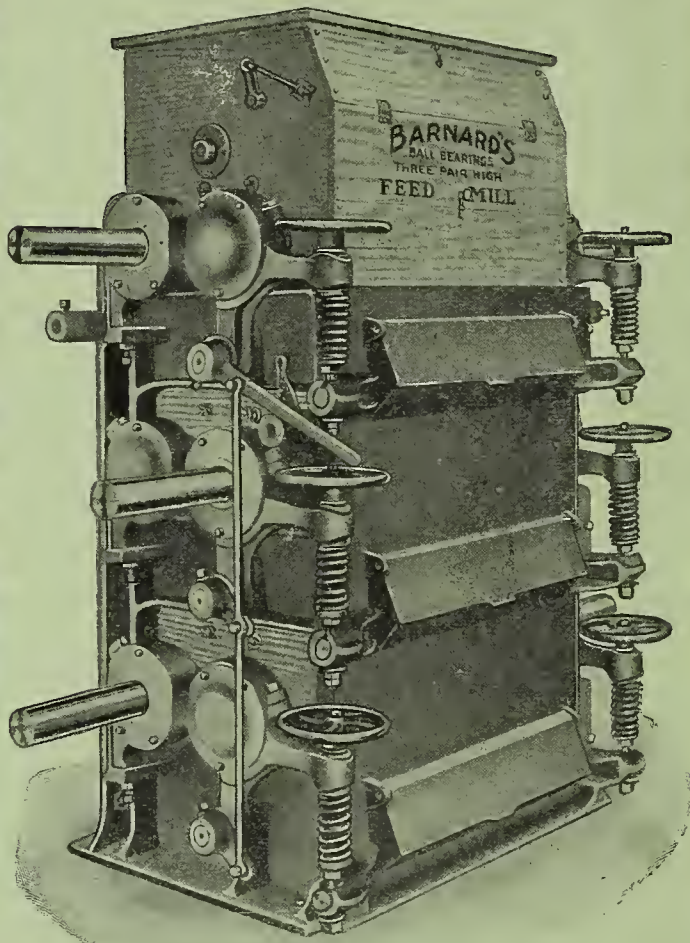
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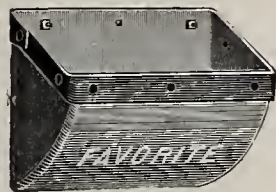
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Grain Elevators equipped throughout with Weller machinery

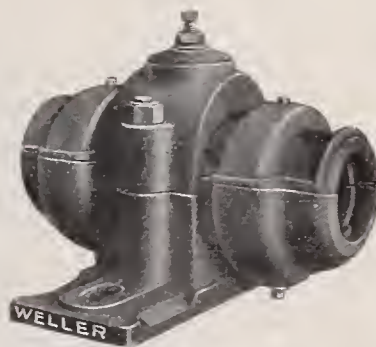
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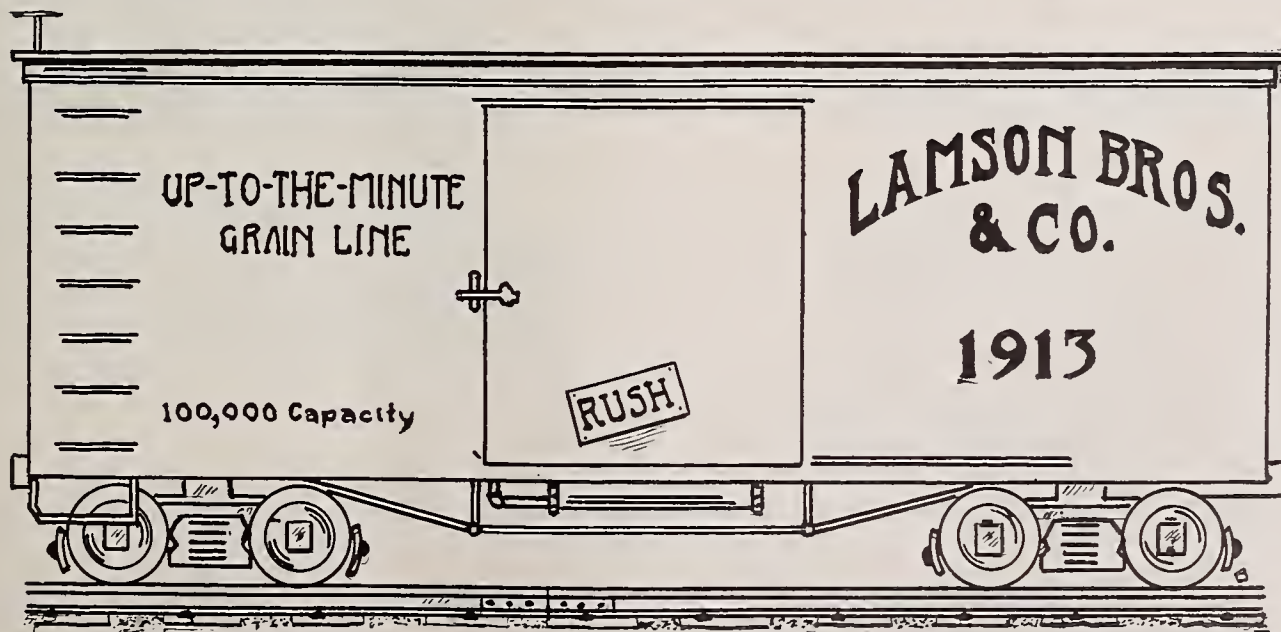
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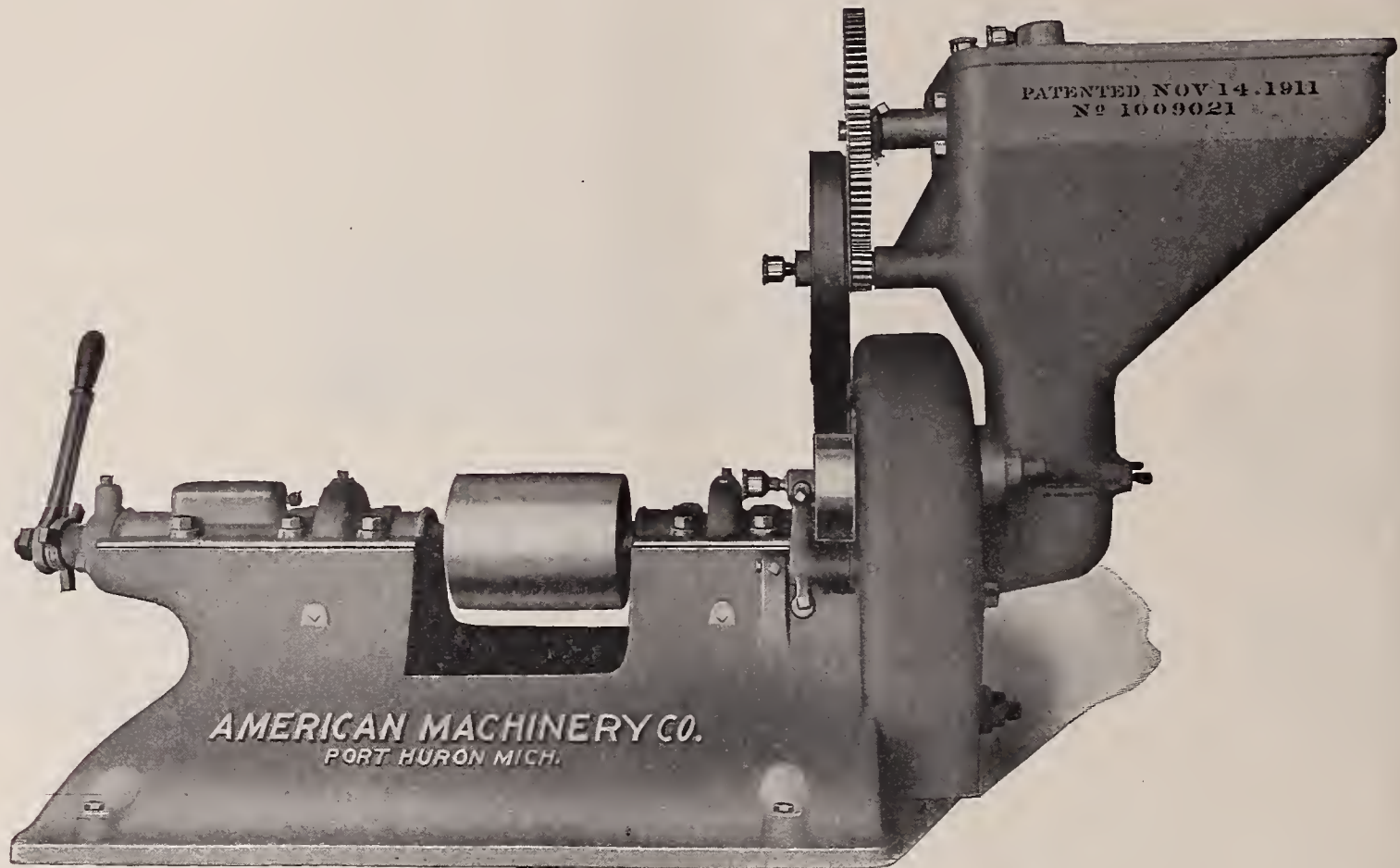
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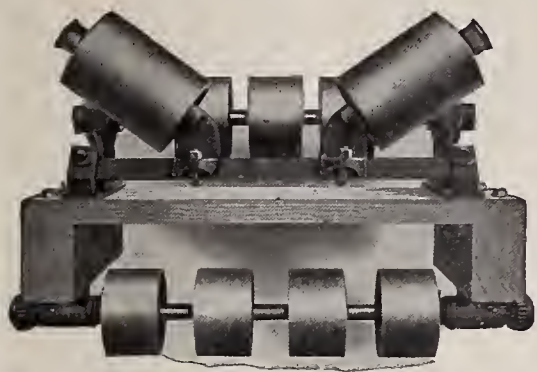
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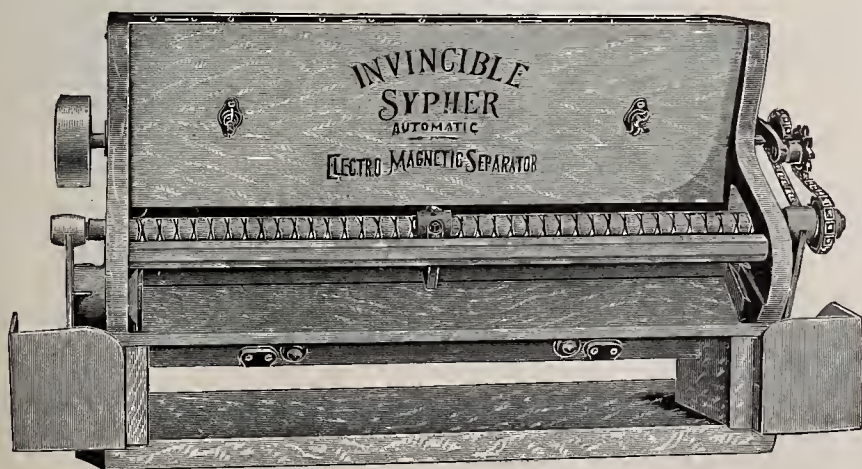
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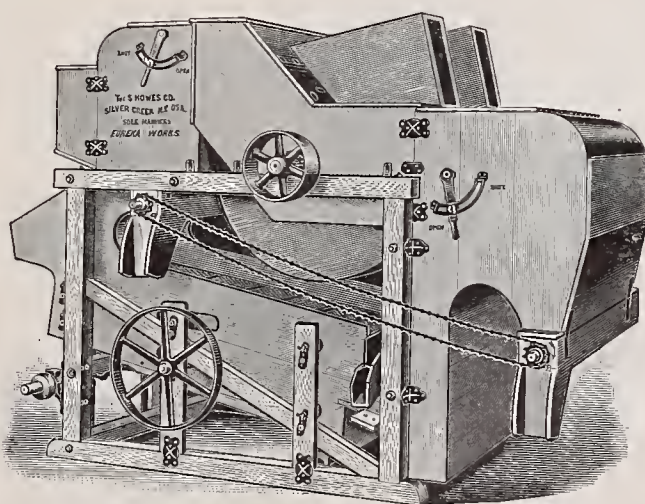
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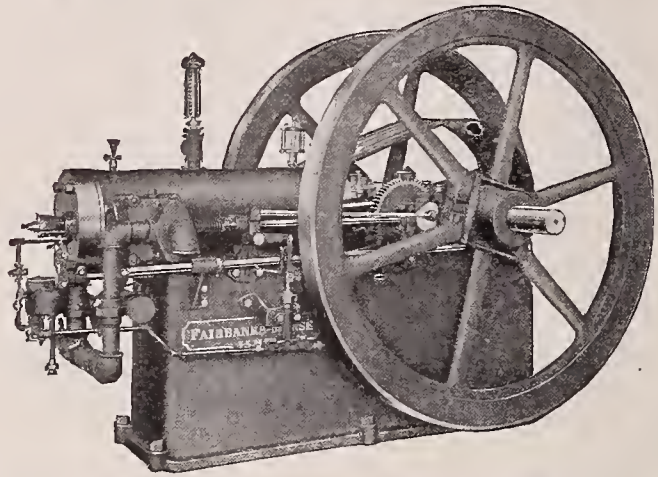
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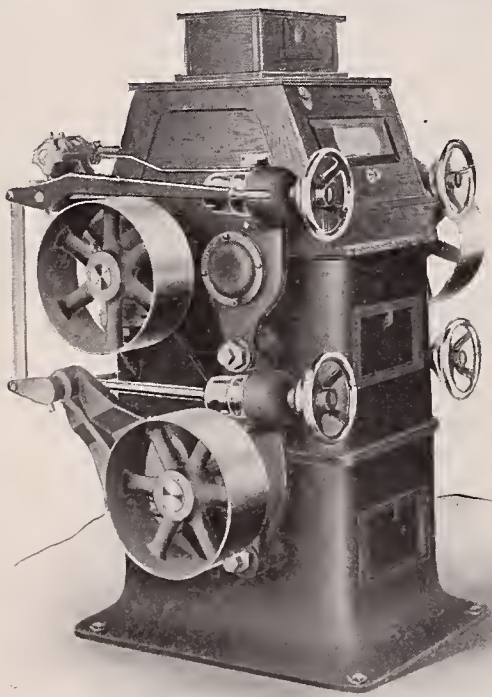
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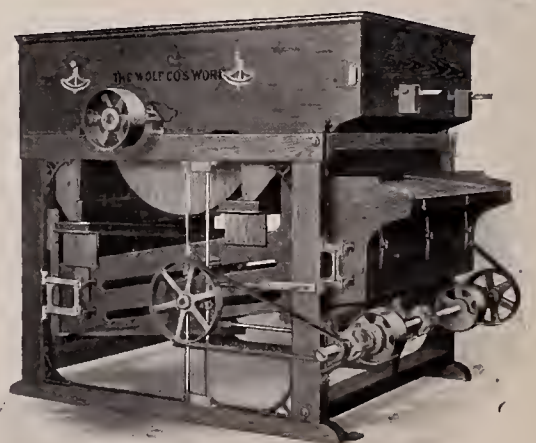


An order placed for either of these machines can-
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make a single payment on these machines before we make a
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Being sturdily built of materials chosen
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While the ball bearing type
is the greatest power saver,
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is also an excellent and ser-
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wagons.



THE WOLF COMPANY, Chambersburg, Pa.



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time, time to count the year just past as good, bad or tolerable. Time to reap what we have sown—to reckon again and see where we can improve the record in the coming year. Perhaps this can be done by adding to your equipment machines that are better suited to attain the quality results you so earnestly desire.

Long years of active experience have fitted Nordyke & Marmon Company to help you obtain these quality results. Our experts can recommend effective methods and equipment for your particular need and our factory can supply your demands promptly and correctly.

Let us get together. Write now while the year is young.

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America's Leading Mill Builders

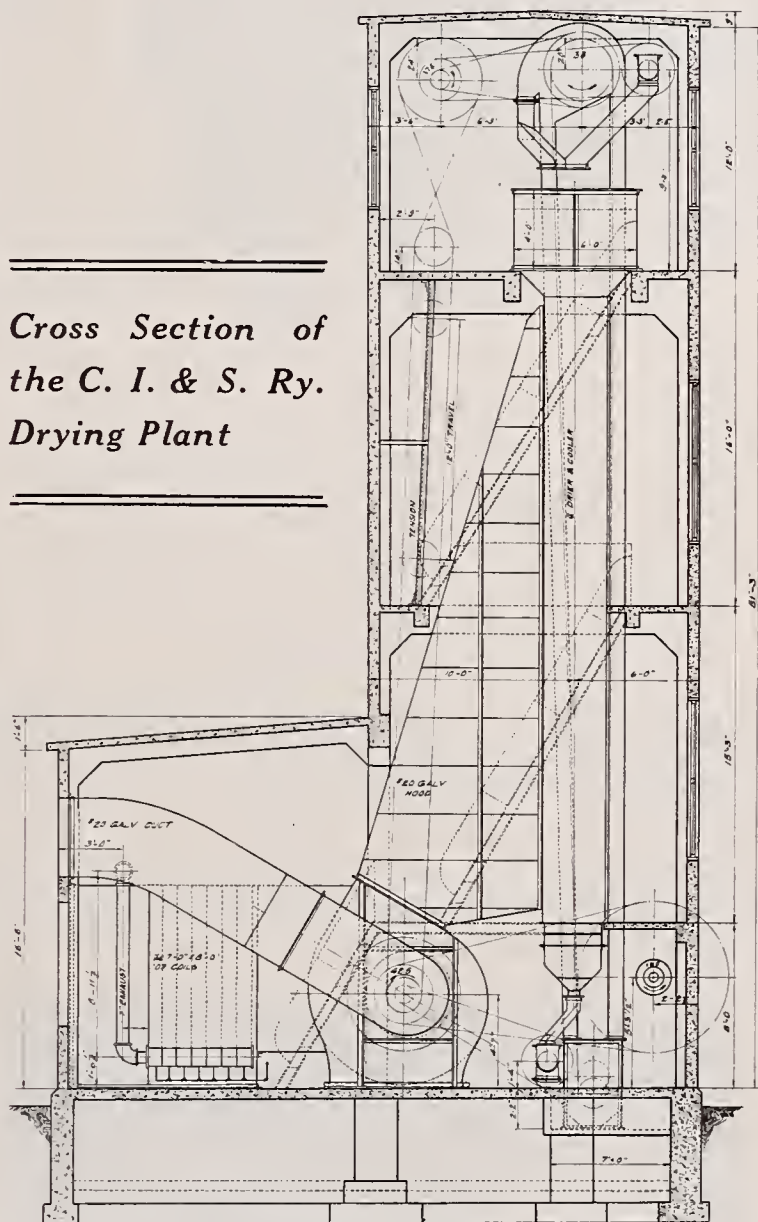
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THE ELLIS DRIER CO.

*Cross Section of
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Drying Plant*



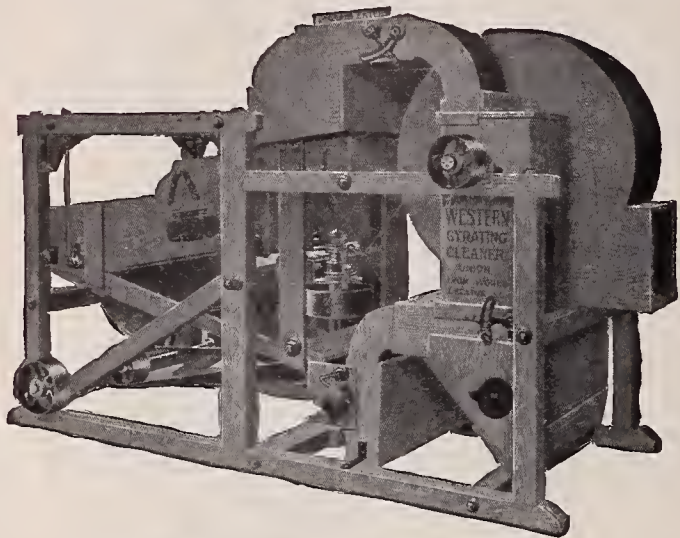
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THE section as shown above is that of the drying plant under course of construction for the C. I. & S. Ry., at Schneider, Ill. The cooler is of the independent type and is of very large capacity for the purpose of handling material from the drier when removing small percentages. Both the drier and cooler operate as continuous feed machines. Exceptional economy in operation will be obtained by the utilization of exhaust steam and the use of a return air system. The plant will have a minimum capacity of 700 bushels per hour.

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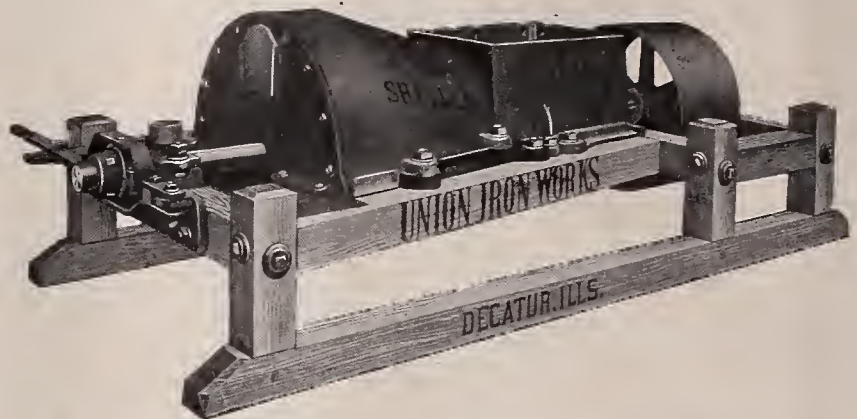
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Write for Catalogue.

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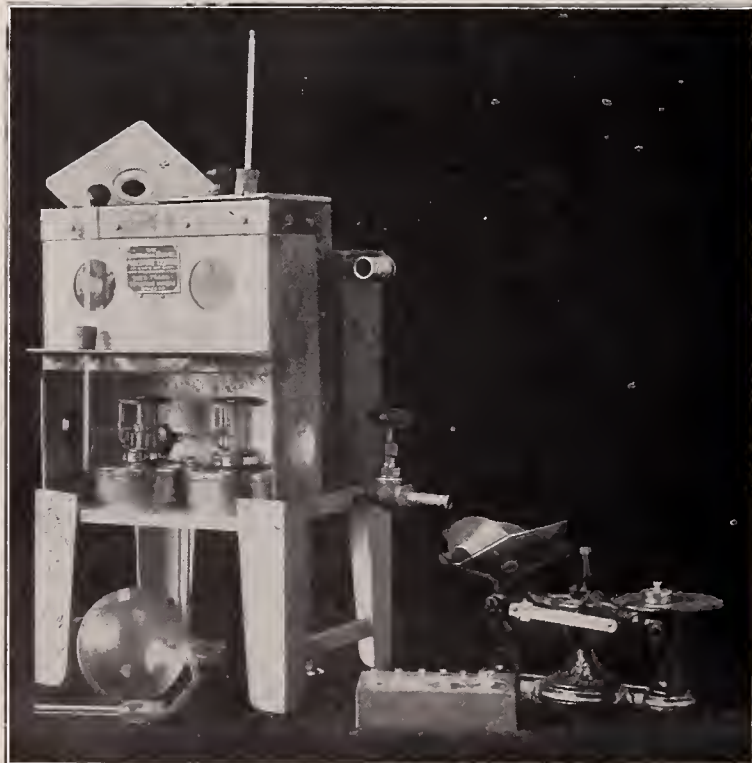
are the recognized standard wherever corn is grown.



The Western Regular Warehouse Sheller

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Official Brown-Duvel Moisture Tester

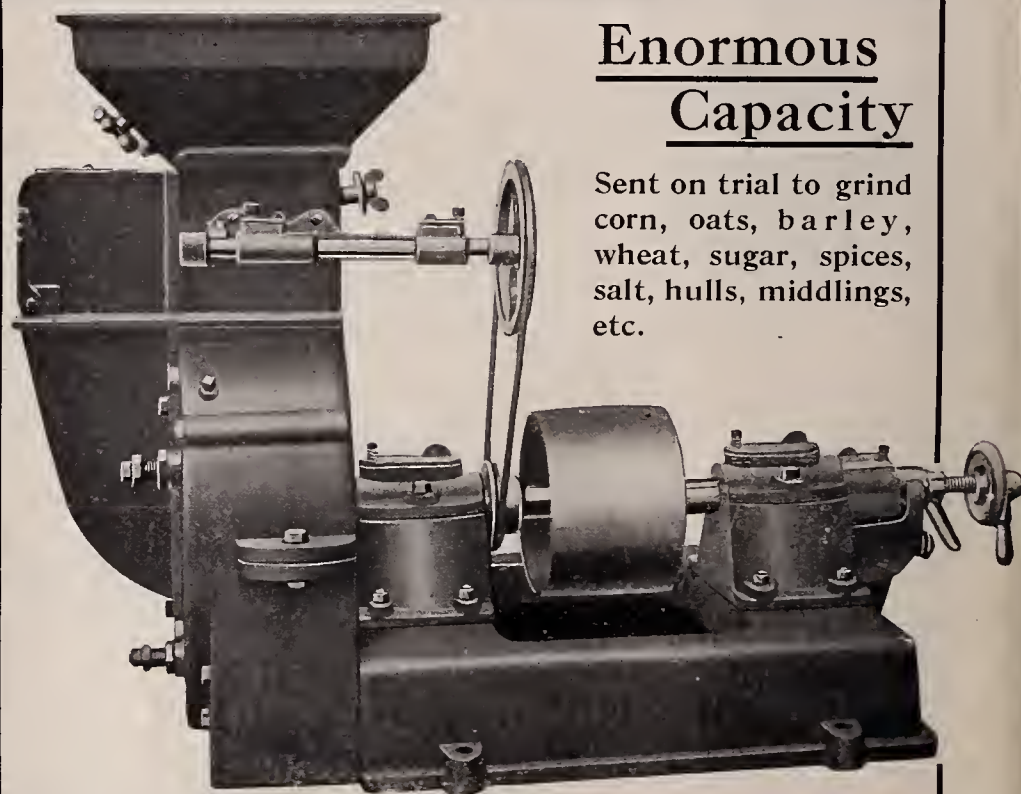


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Enormous Capacity

Sent on trial to grind corn, oats, barley, wheat, sugar, spices, salt, hulls, middlings, etc.



FOUR SIZES—16 inch, 18 inch, 20 inch, 24 inch

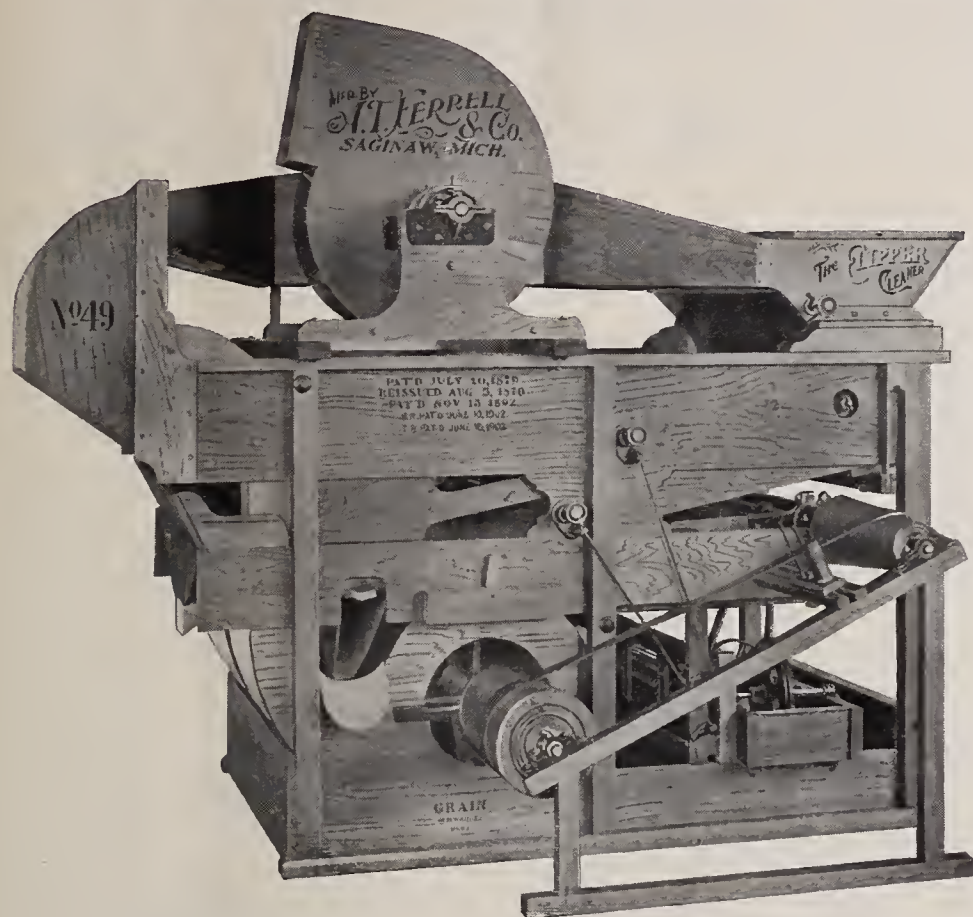
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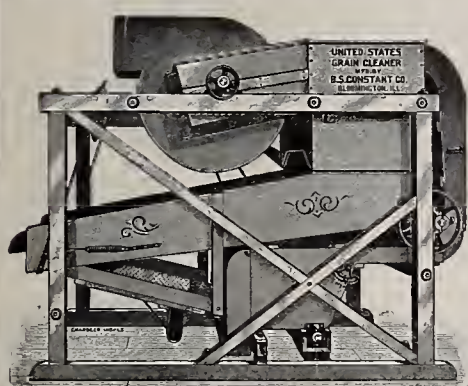
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The No. 49 Clipper is a first-class grain receiving cleaner for local elevators. It has large capacity, is solidly built, is dustless and will make the most difficult separations. It is simple, strong, convenient and will not easily get out of order. It requires less for repairs than any other grain cleaner on the market and is always ready for business. Ours is the only successful combination cleaner on the market. We give a 30-day guarantee with each machine.

If you are looking for the best cleaner, we would like to show you what we have. Our line of clover seed cleaners is strictly up-to-date. All sizes and capacity. We can furnish machines with Traveling Brushes, Air Controller and all modern improvements. Send for catalog and discounts.

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THE U. S. Grain Cleaner

is the best in the Union and should be in the top of all elevators where Corn, Oats and Wheat are shipped.

Higher Grades—Higher Prices.
Long life machine.
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Five Separations and
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Best made.
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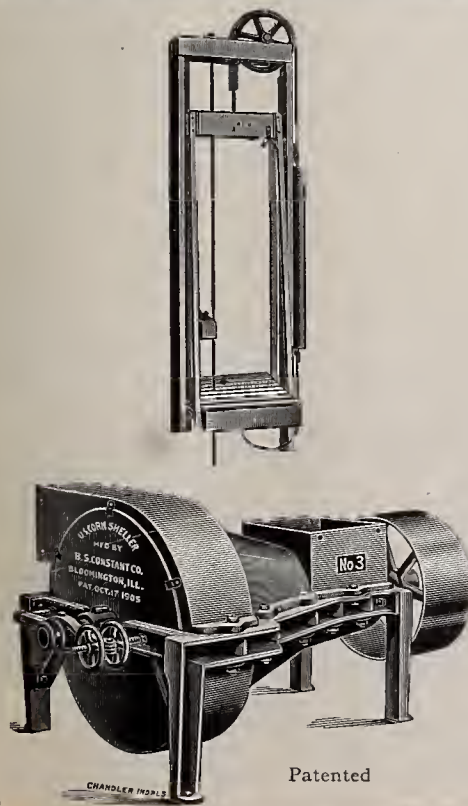
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Fan Discharge, over or under, right or left hand.

Iron or Wood Frame.
No Lower Hoppering.
Cheapest Installed.
Quickest and Cheapest Repaired of any Sheller on the market.

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E. P. BACON CO. Grain Commission Merchants

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We do not engage in buying grain on track or otherwise and are not interested in any manner in the purchase or manufacture of grain of any kind either in the country or at terminal markets; our business being confined to the selling of grain and seeds on consignment for the account of shippers.

Our managers in the three markets keep in constant touch with each other by wire during trading hours as to the condition of the cash grain market at each place, and by exchanging samples daily by mail representing actual sales.

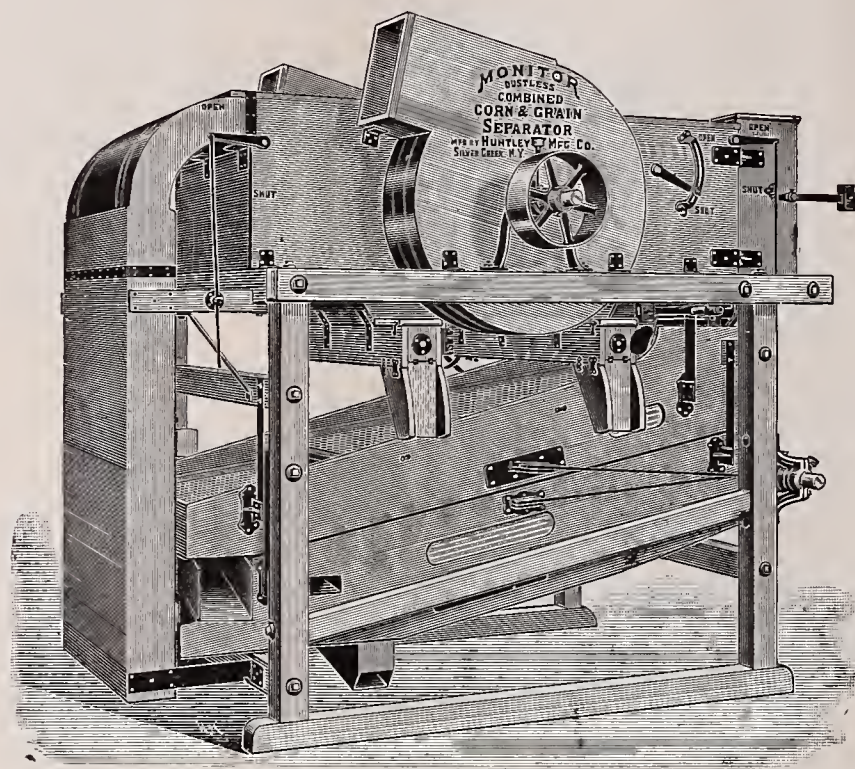
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— The Original —
The first
"COMBINED"
CORN AND GRAIN CLEANER



An exclusive design — its best features protected by patents.

Very light running—very superior screen and air separations.

Why have two cleaners if this one will answer as well?

**In hundreds
of elevators it
answers for two cleaners**

In elevators handling corn with cob, wheat, oats, barley, rye, etc., quick shifts in cleaning are often necessary. Many elevators maintain two separate cleaners for their work—a mistake in many cases as they could easily handle their cleaning with one "Monitor" *Combined*. This machine carries two independent screen outfits, grain is diverted to either without stopping machine—always ready for two kinds of work without a change of screens. Occupying the floor space of only one regular machine it handles the work of two cleaners. For quick service nothing so efficient has been introduced up to the present time.

**It will greatly
simplify—and reduce
cost of your cleaning work**

Simplified cleaning operations a dead certainty—the cost for operator's care and attention lessened in direct proportion. A compact, sturdy type of heavy-duty cleaner that actually performs closer, more economical work—so guaranteed. For light power and ease of regulation it stands quite alone in the *combined* cleaner field. Their appointments throughout are easily the best to be had—equipment features of these "Monitors" are improvements decidedly to your advantage. Get acquainted with them, please.

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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.



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English and Foreign subscriptions, \$1.75 per year.

VOL. XXXI.

CHICAGO, ILLINOIS, JANUARY 15, 1913.

No. 7.

New Concrete Storage Addition to Interstate Elevator

Chicago Elevator Adds Storage Unit with Complete System of Conveyors Running in Bridges and Tunnels

About three and one-half times its original capacity has been added to the Interstate Elevator at Fifty-first street and the Erie Railroad tracks, Chicago, by the erection of a storage addition, the work representing the latest ideas of storage construction by the Stephens Engineering Co., Monadnock Block, Chicago, who were awarded the contract and carried it to a successful conclusion. This new storage part was completed in September, 1912, and is constructed of reinforced concrete. The original elevator shown at the left in the accompanying illustration was built about fifteen years ago, and re-

modeled in 1905. It has a capacity of about 100,000 bushels. The storage addition will hold 350,000 bushels and will be used in conjunction with the old elevator by the Quaker Oats Company.

With three separate bridges running from the elevator to the new storage part, and concrete tunnels under the tracks, it is thought that the facilities for rapid and efficient handling of the grain can scarcely be excelled. Each of the bridges has a span of 100 feet and carries a 30-inch belt conveyor. Upon reaching the gallery over the bins, the grain is delivered by spouts either to nearby bins

or to a 30-inch reversible belt conveyor, with a four-pulley tripper, running the full length of the building.

The grain is taken from the bins by two 30-inch reversible belt conveyors which discharge to either of two other 30-inch belt conveyors running through concrete tunnels, underneath the tracks, to the shipping legs in the old workhouse. In all there are eight 30-inch belt conveyors, each driven by an individual motor controlled at the drive end. There are fourteen motors in the elevator, thus making a total of twenty-two altogether. The elevator when



THE INTERSTATE ELEVATOR, CHICAGO, SHOWING NEW STORAGE ADDITION DESIGNED AND CONSTRUCTED BY THE STEPHENS ENGINEERING COMPANY.

originally built had a complete steam plant, but when it was remodeled the steam plant was removed and electric motors installed. Power to run these motors is obtained from the power house of the Chicago & Western Indiana R. R., which is about a quarter of a mile distant.

The storage addition is thoroughly economical regarding space occupied. The most modern construction has been employed, consisting of cylindrical concrete bins arranged in a cluster of three bins wide and seven bins deep, or twenty-one cylindrical bins. Five of the bins in the middle row, however are divided into quarters and there are interspace bins between the cylindrical bins, making a total of forty-eight bins.

The whole concrete plant rests upon a pile foundation. The excavation was carried down 20 feet through filled ground for an old track elevation, after which 1,000 piles, each 30 feet in length, were driven.

The Interstate Elevator, complete with the new storage addition is now very well equipped to take

care of the requirements of the Quaker Oats Company, who lease it from the Erie Railroad. The elevator itself when remodeled presented many of the most up-to-date features in elevator construction, and the individual motor drive when installed in 1905 placed the elevator a step in advance of its competitors with reference to ease and rapidity of handling. With a double drum cable car puller, operated by an electric motor and capable of pulling twenty loaded cars, and a motor controlling room where a switch board operator can instantly start and stop all the motors at distant points, together with many other modern features tending to simplify the storage and loading of grain, it can readily be appreciated that the Interstate Elevator has for some time been in a position to take care of much more than the original capacity of 100,000 bushels. It was necessary, however, to add to its storage room without detracting from the efficiency of the elevator, so the new unit was constructed across the tracks and connected with the old building by bridges and tunnels as described.

with mere earth-counted age. But Spica in the Virgin is still a first-magnitude star.

Finally, the Egyptians named as Isis (the Wheat-Mother) any one of the great stars, especially Sirius, that might come up at dawn a little ahead of the sun, during the earth's annual pilgrimage in the universe. Each one of a ring of the great stars was in turn Isis, Mother of Wheat. The priests looked out of their dark chancel and saw the Celical rising of the star; they knew the sun (Horus) was exactly so many minutes in the rear of Isis; they prepared to salute "Horus, sitting in the lap of Isis."

There is a close linguistic relation between Isis and Osiris, both at Memphis and Babylon, as there is a close tie between Osiris and Apis (Ape) in Serapis (Osar-Hapi).

Followers of the Grain Trade, in pursuing their honorable calling, should clearly understand that the honors paid to Woman in connection with wheat were one of the earliest religious acts of mankind—"from China to Peru."

The Mother of Wheat was worshiped at every civilized capital to the time of Rome. Round cakes of flour were sacrificed to her in the Roman temples, as they had been sacrificed in every preceding temple of the gods from the time temples were built. The breaking of the bread at the vernal equinox was always the most religious, the most hopeful, ceremony of mankind.

The Greeks called the Eastern Mother of Wheat "the goddess of ten thousand names." At Babylon she was the "Mother of Bar," a name of Nimrod, the Cero of Ceros (the first black giant with the club and leopard skin), and Bar was a Chaldean name for grain, or Wheat.

THE AMAZONS.

Scattered over the Old World are peoples, or vestiges of communities where Woman was the most important character—in the Caucasus, the Basque provinces in Spain, in Brittany, in Southern Ireland, the Canaries, and elsewhere. When Strabo, the first geographer, described the Iberians (Spanish) he recounted the traditions of the Amazons, and their journeyings across the world from the Caspian region. On the theory that all gods were once human beings, there was a wheat mother, who organized the harvest and brought abundant and adequate food into the world before she died. Then she was worshiped.

THE "MYSTERIES."

The "Mysteries" so peculiarly celebrated came to Greece from Asia Minor and "the pre-alphabetic World," as Sincox calls it. The story of Demeter (Ceres, Isis) and Persephone (Proserpine, a feminine Osiris) was given its esoteric meaning.

III.

LINGUISTIC PALEONTOLOGY.

WORDS.

The early inhabitants of Mesopotamia, and their posterity, down to the time of Alexander's conquest, wrote what are called Cuneiform (wedge shaped) records. (See Mesopotamia). For a "pen" they used an instrument that impressed in clay the shapes of variously sized wedges. The clay was then baked.

Out of this Cuneiform language evolved the Sanscrit and Zend.

In the nineteenth century Monsieur Pictet, of Geneva, Switzerland, invented "Linguistic Paleontology"—that is, archeology in words. By this theory all words and all traditions that all races possess in common, must have been adopted in Asia before the dispersion of tribes as catalogued in the tenth Genesis. We thus learn that the Cuneiform languages and their immediate outgrowths, Sanscrit and Zend, give us for the word grain, the word *adna*, or *anna* in Sanscrit; *ador* in Latin; *acti* in Scandinavian; *ata* in Anglo-Saxon; *etla* in Irish; and *eat* and *ate* in English. For milling or ground, we have *malana* in Sanscrit; *mullo* in Greek; *molo* in Latin; *meilim* in Irish; *malam* in Gothic; *malti* in Lithuanian; and *mlieti* in Slavonic. For flour we find *samida* in Sanscrit; *senidalis* in Greek; *simila* in Latin; *similia* in Scandinavian, and *smeodoma* in Anglo-Saxon.

The Romance of Grain

A History of Grain and the Grain Trade of the World, from Remote Ages

By JOHN MCGOVERN

Author of "The Fireside University", "Hospitality", "Paints and Pigments", "Trees", "An Empire of Information", etc.

I.

PREHISTORIC MAN.

THREE WESTERN TRIBES.

Modern ethnologists are inclined to assort the tribes of Western civilized Man into three prehistoric breeds—called "Mediterranean," "Alpine," and "Northern." Commerce is chiefly interested in the "Mediterranean" breed, the name being used only to mean a kind of men that seems to have first used the apparatus of the desert-caravan (see anon) in organizing a sea-caravan. These men are conjectured as always dark in hair, oval in face and skull, and the darkest in complexion of all the white men.

The movement which they originated may have had an early demonstration on some island in the Persian Gulf or the Sea of Aral (then part of the Caspian). They instituted what the Romans long afterward called *orbis terrarum*, the Circuit of Lands—the sea-caravans going from port to port in the circuit, probably never out of sight of land. The Phoenicians, ages later, moved their circuit from the Persian Gulf to the Mediterranean Sea (hence the name); their posterity moved to the Atlantic Ocean; and the world now gazes on the final grand circuit; instituting, on the Pacific Ocean, an *orbis terrarum*—which with the opening of the Panama Canal (the greatest public work since the building of the Pyramids), must excite the wonder and curiosity of even the most unob-serving.

The present preparations, at the world's ship-yards, for this huge commerce of the world's final commercial stage, are on a scale entirely equal to the national ambitions that perfected the Canal and purged the Isthmus of its dangers to human life.

"The intrusion of the Mediterranean men on the Alpine men," says Professor Myres, of Oxford, "was a part of a much larger convergence of animals and plants from the south and southeast into the colder, moister regions which have been released since the Ice Age."

THE WET WAYS.

When Man substituted the cheaper and pleasanter water transportation for desert transportation, the poets were warm in their praise of "the wet ways," as Homer puts it. The marks of a pulsating force—waves of earth, of sand, of water, impressed themselves on early Man, and he wrote about them as soon as he could put thoughts on record.

GRAIN THE PRINCIPAL FREIGHT.

The domesticated animals that could be eaten, themselves formed a part of the caravan, before it put to sea. Wheat, Barley and Rice were the prin-

cipal property that was either conveyed or sought for the return journey.

THE GREAT SERPENT MOUND.

These were Serpent-worshippers, of the order of the star-worshipping Egyptians before the Sun-worshippers came. Their descendants reached America. Stone spades and axes were found in the Ohio River mounds. American Indians had no tradition of these Mound Builders, who mined copper in the Lake Superior region, while the Indians, who came later, were more strictly Stone Age men.

The Totems of Egypt were not explicable to Julius Caesar. But to-day animal mounds are studied all over the earth with reference to the history of early man.

THE PREHISTORIC MILLS.

It may be that the earliest evidences of Man's prehistoric existence do not reveal the knowledge of Wheat, because the most important discoveries of *caches* afford only weapons, or their unfinished material. But many of the caves, in which there have been successive deposits of limestone drippings, reveal the hand-mill, the quern—that is, two stones, the upper one to be turned with a handle—as an implement of the former occupants. The grinding bowl, or mortar and pestle, are constant among findings of the unknown Stone Age. Archaeologists like Lenormant believe that the proprietors of prehistoric factories and warehouses of stone weapons raised the grain themselves, extensive traffic and organization of labor having already set up, and weapon-makers being able to secure grain in trade.

II.

ISIS.

THE STAR OF THE GRAIN TRADE.

In some way, early man especially connected and honored woman in her relation to Wheat and other grain. The Virgin with the wheat-ear in her hand—this is Isis, Ishtar, Ceres, Maia, whether in Memphis, Babylon, Athens, Rome, ancient Paris, Mexico, or among the American Indians. Isis was the Greek way of saying *ishar*, the woman.

The Chaldeans gave the largest place in the Zodiac to the constellation of the Virgin. They pictured her as a maiden holding an ear of wheat; and the star that "rode brightest" was called an ear of wheat, or barley, and is still named Spica (ear). They addressed her as the "Mother of Corn" (Wheat), and the starry monument represented the "Spirit of Corn." It is not unlikely that Spica was much more brilliant and larger then than now-days, just as the star Castor seems to have dimmed

By these words it is opined that men *milled* their grain into flour, using those words before the Mediterranean men migrated out of Asia.

MILLER.

The word *miller* has a genealogy reaching around the planet, and dating back at least to the time when Asshur (Assyria) the son of Shem, the son of Noah, went forth from Babylon and builded Nineveh—for ages the Chicago, or market-place of the world.

MONEY.

Before Man (the free and property animal) became a farmer, or gatherer of Wheat, Barley and Rice, he had been forced out of the forest, and was a parasite on his domestic animals. The ox and the sheep became money, or measures of value. When

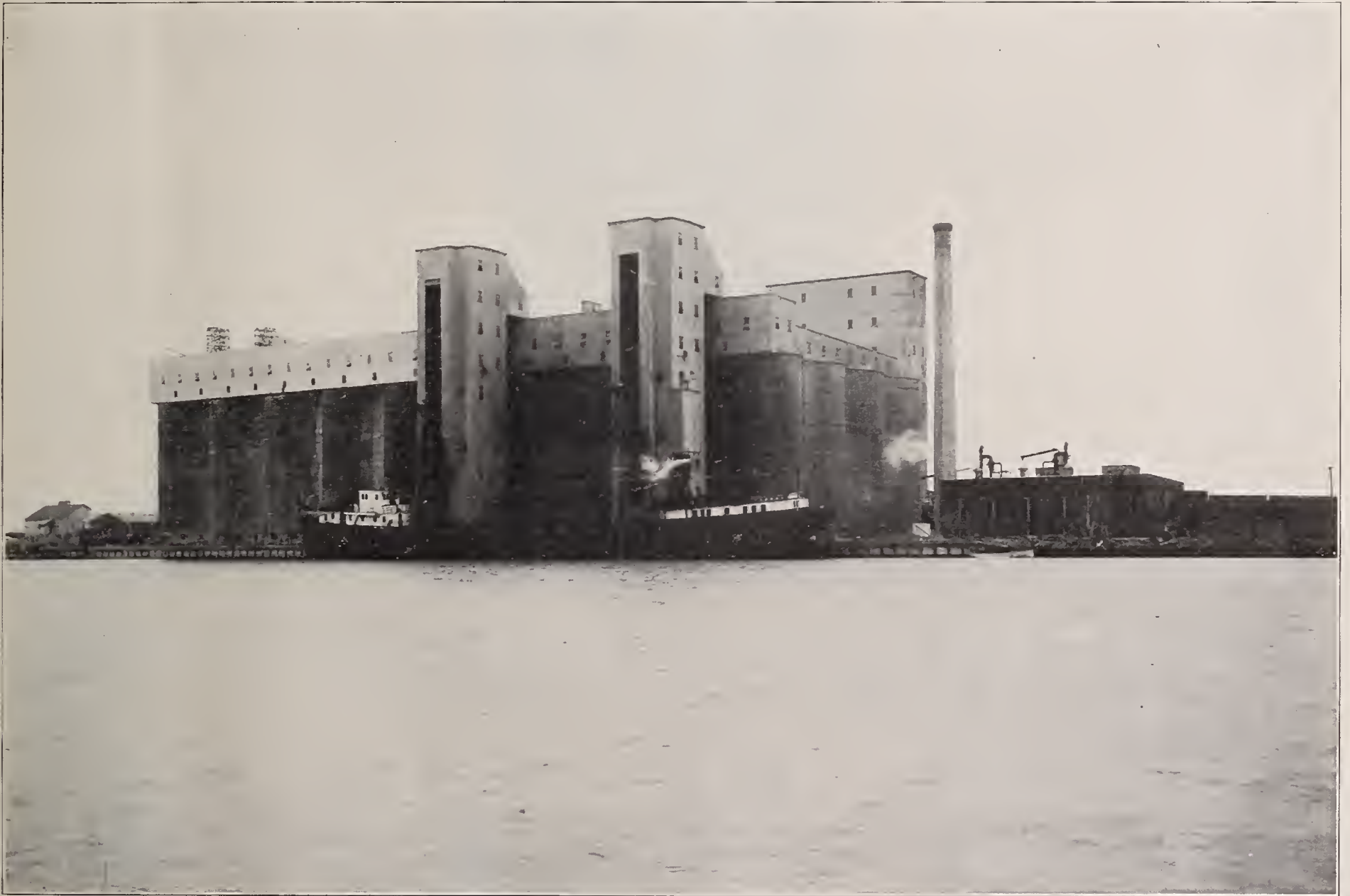
Canadian Pacific Elevator at Port McNicoll

New Storage Unit Recently Added Gives Total Capacity of Four Million Bushels— Original Equipment Easily Takes Care of New Part—Whole Elevator Planned for Added Space When Necessary

About three years ago the Canadian Pacific Railway decided it was necessary to have facilities at the eastern end of their lake haul in addition to their large elevators at the head of Lake Superior. This eastern terminal would allow them to store or reload grain received from their many grain vessels, and allow them to ship eastward through Canadian territory with much greater efficiency. A

that a cylindrical bin does. The walls of the bins are 80 feet high.

The entire structure is of steel and concrete. The two marine towers which traveled along the side of the original elevator, now fill the new storage unit in the same manner that they filled the first unit. Each of these marine towers is 150 feet in height and is built of structural steel covered with



ELEVATOR OF THE CANADIAN PACIFIC RAILWAY AT PORT McNICOLL, ONTARIO, CANADA.
Planned and Erected by the John S. Metcalf Company, Montreal and Chicago.

very sudden migration was necessary, the skins of the animals became money, and the first coins were key-pieces out of the hides, fitting in, and showing ownership. In Sanscrit *cattle* were *pacu*; Latin, *pecus*; Borussean, *pecku*; Greek, *po'u*; Gothic, *faihu*. In English, we have pecuniary, etc. Thus man had pecuniary affairs thousands of years before the King of Lydia minted the first golden coin, with the picture of the bull. Moving tribes paid for grain with this universal money—cattle.

(To be continued.)

The grain and hay dealers of Atlanta, Ga., expect an early decision from the United States Supreme Court of the case which they brought to compel the railroads to remove rates on grain and grain products which, it is claimed, discriminated against Atlanta in favor of Nashville. As it is the roads allow Nashville dealers the rebilling privilege, that is, they allow them to receive shipments from other states and then to reship to their customers at a continuance of the through rate. Atlanta shippers, however, are compelled to reship at local rates, which it is asserted, greatly decreases business.

site was obtained at Port McNicoll, Ontario, which is at the extreme eastern end of Georgian Bay about seven miles from Midland. The big elevator having a storage capacity of 2,000,000 bushels was completed in quick time considering the magnitude of the work and was described and illustrated as originally constructed in the December, 1910, issue of the "American Grain Trade."

The original elevator had been in operation only a year before it was thoroughly demonstrated that it was not of sufficient capacity to take care of the vast volume of grain business, and orders were placed for an additional storage unit having the same capacity as the original one, thus making the total capacity 4,000,000 bushels.

The new storage unit was an exact duplicate of the first and was completed in time to be filled with the 1911 crop before the close of lake navigation. It is 179 feet wide and 226 feet long, making the new length of the elevator 452 feet. There are altogether 64 cylindrical bins each 32 feet 11 inches in diameter, and 62 interspace bins. Each of the interspace bins holds about one-fourth of the quantity

corrugated iron and mounted upon 40 heavy car wheels. There are steel stairs running all the way from the bottom to the top and the roof and floors are of concrete. Each of the towers has a capacity of 20,000 bushels per hour, and each one is self propelling, traveling independently of the other on a double track between the storage house and the slip. The marine legs are designed so that they can enter passenger boats as well as freight boats, and a complete set of air operated shovels and clean-up shovels is provided to bring the grain to the legs as rapidly as possible.

The grain is delivered to 1,000-bushel scales after which it is taken to the top of the towers and dropped into one of the bins of the storage house or working house. The longitudinal conveyors which receive the grain from the marine towers run the entire length of the two units. Grain for shipment from the new portion is conveyed through the basement of the first storage to the car shipping house. In this car shipping house 200 cars can be loaded in 10 hours. Cars can also be unloaded in the working house and boats can be loaded by

means of a special loading spout on one of the towers.

All the machinery is electrically driven, power being generated in a steam plant separate from the main building, shown at the extreme right in the illustration. This power house has two Westinghouse-Parsons Steam Turbines, direct connected to generators which produce the electricity for operating electric motors. The plant has a capacity of 1,500 horsepower. The smokestack is of reinforced concrete and is 160 feet in height. Besides supplying motive power, the power plant takes care of an elaborate system of incandescent and arc lamps, the elevator being so well lighted as to make night operation as easy as running in the day time.

There are about $1\frac{1}{2}$ miles of wharves altogether and it is planned to add storage units similar to the last one whenever the volume of business renders more room imperative. There is adequate room for future extensions bringing the entire capacity up to 10,000,000 bushels. The entire plant is fireproof, for excepting the transmission ropes there is nothing combustible in it. All the windows have wire glass and metal conduits have been provided for the electric wiring. A fire pump has been installed which supplies water to a number of hydrants placed throughout the elevator.

The plant has a flour shed, 700 feet long and also a freight shed of the same length. There is a carpenter shop, a coal platform, a pump house and a customs house. In addition a sleeping house and an eating house have been provided for the freight porters. The construction work has been under the supervision of J. M. R. Fairbairn, assistant chief engineer of the Canadian Pacific Railway and C. W. P. Ramsey, engineer of construction for the company, while all the work was designed and erected by the John S. Metcalf Company, Engineers, of Montreal and Chicago.

KAFFIR CORN IN OKLAHOMA

For the past five years an extensive campaign has been carried on in Oklahoma to induce the planting of kaffir corn. It is well known that Indian corn is an uncertain crop in many parts of Oklahoma, because of the possible lack of rainfall at the right time during the growing season. Kaffir corn, however, it is asserted, never fails whatever the season and it is becoming more and more a staple crop on Oklahoma farms.

One of the big trunk line railroad companies has lately sent through more than 40 counties a special train equipped in every way to demonstrate the value of kaffir and surest way to cultivate it.

In charge of this agricultural train was John Fields, formerly director of the United States Agricultural Experiment Station at Stillwater, who is said to know more about kaffir corn and its possibilities than any man in Oklahoma. He began to exploit kaffir corn first by convincing bankers that for every \$100 loaned to a farmer the latter should be required to plant a certain number of acres of kaffir corn, so that the farmer might have money with which to pay his note if other crops should fail. The plan was taken up by bankers throughout the state and during the present crop season the acreage of kaffir corn in Oklahoma was equal to the entire acreage in the United States in 1909, the yield amounting to 30,000,000 bushels.

The planting of kaffir corn in Oklahoma in 1913 will be enormous in acreage. Industrial agents of railroads and agents of the state board of agriculture are telling the farmers how to plant, harvest and market the corn.

The corn yield of Minnesota has been quadrupled in the last twenty years. The production has increased from 24,192,000 bushels in 1892 to 99,000,000 bushels in 1912. The acreage of corn in most of the southern counties of the state equals or exceeds that of any other grain sown and southern Minnesota was at the time noted as the leading wheat producing section of the country. Even as far north as the central section, almost half the acreage sown to crops is corn.

JAMES B. CANBY PASSES AWAY.

By E. R. STEWERS.

James B. Canby, who died at Westport, N. Y., on December 27, 1912, of a general physical breakdown after several months' treatment in a sanitarium where it was hoped that he might be restored to full health and vigor, was one of the best known members of the Commercial Exchange of Philadelphia, having taken an active part in the affairs of that organization for forty-five years.

He was elected vice-president in 1887, and during that year occurred the death of the president, Wil-



Photo by Gutekunst.

JAMES B. CANBY.

liam E. Burk. Mr. Canby, by virtue of his office, became president and was chosen again to that position in 1891. He also served as director of the Commercial Exchange during the years 1885, 1886, 1895 and 1896, and was chairman of the Grain Committee for a number of terms. In the year 1898 he joined the Union League Club and was strongly urged by his friends, at one time, to become the president of that widely known organization. He

Philadelphia representative of the Lea Milling Company, Wilmington, Del.

At the time of his death he was associated with his son, Franklin P. Canby, at 8 North Front street, Philadelphia, in the flour and grain trade. For several years past, although a regular attendant on the grain floor at the Bourse, he appeared to be in very poor health. While chairman of the Grain Committee he took a very active part in the investigating of the alleged rebating said to be allowed some of the leading grain receivers of Philadelphia by the trunk line transportation companies, and was ever ready to battle for the rights of the Commercial Exchange on all occasions. His city residence was at 2308 Spruce street, where the funeral took place on the 30th of December. The interment was in the Woodland Cemetery, West Philadelphia, the Commercial Exchange taking suitable action upon being informed of his death, and placing a beautiful floral tribute upon his last resting place. His wife died some years ago, and he is survived by Franklin P. Canby and James B. Canby, Jr., two sons, with a married daughter, Mrs. Bradshaw B. Chinchester of Leesburg, Va. Numerous expressions of regret have been sent to the family, from Mr. Canby's friends throughout the country.

A BUSY ELEVATOR IN IOWA

Always a scene of great activity is the elevator of William K. Neill, New Sharon, Iowa. This elevator was erected in 1870 and since that time has enjoyed a large measure of prosperity from the great producing country in which it is located. The main building shown in the center of the accompanying illustration is of the overhead cribbed construction, measuring 20 feet wide by 80 feet long, and contains 20 bins. Each bin will hold 1,000 bushels, thus giving a total capacity of 20,000 bushels.

The driveway shown, runs along the west side to three dumps, two for small grain and one for ear corn. All corn is received on the ear and shelled by means of a Victor Corn Sheller. There are three elevator legs, one from each dump, and an independent elevator leg for loading. The cupola, built for the loading elevator leg, is 12 feet square, and is equipped with a Fairbanks-Morse Automatic Scale having a capacity of 1,000 bushels per hour. All grain goes direct from the scale to the cars, with a drop of 60 feet.



ELEVATOR OF WILLIAM K. NEILL, NEW SHARON, IOWA.

was also numbered as one of the charter members of the social organization now existing in Philadelphia known as the "Sons of Delaware."

Mr. Canby was born in Delaware, about 68 years ago, and after an education at the public schools, embarked in the flour and feed business, identifying himself with the then well known firm of A. J. Cattell & Co. Afterward he became a partner in the flour, feed and grain concern of Warr & Canby, with offices and warehouse on Delaware avenue and Front street, Philadelphia, remaining in the firm until the death of Mr. Warr. He was for some years the

The small building extending out from the grain elevator at nearly the center of the picture is an auxiliary storage house or grain annex. This is of cribbed construction, measuring 24 by 48 by 25 feet high and is divided into three bins with a total capacity of 25,000 bushels. The grain annex is filled by means of a continuous drag chain, so arranged that loading and unloading can take place at the same time. For instance, the drag chain can be putting oats into an upper bin at the same time it is unloading corn from a lower bin. The chain goes direct to the elevator leg.

Directly alongside of the grain annex is a small building used as a chaff house, while beside it is a large shed with a cement floor and open end used for storing corn cobs. The round brick structure at the extreme left end is a cob consumer, 12 feet in diameter and 30 feet high. Here all the surplus cobs are burned. At the right is a seed, feed and wool house; while at the opposite end, not shown in the illustration, is a mill room, 20 feet square, equipped with a three-roller light-running mill of the Barnard and Leas make. A 20-horsepower Fairbanks-Morse Gas Engine supplies the power for the mill, shelling plant and part of the elevator. A recently installed electric motor operates the loading elevator leg and two small grain elevator legs.

NEW RULLING OF COMMISSION MAY LESSEN CAR SHORTAGE

As the result of a movement started at the Norfolk meeting of the Grain Dealers' National Association, the Interstate Commerce Commission has made a ruling that is expected to materially lessen the car shortage so far as the grain trade is concerned.

It will be remembered that at the Norfolk meeting a resolution was passed calling attention to the hardship imposed on shippers in compelling them to give the destination and capacity of cars required and to observe the minimums of 40 M for oats, 56 M for shelled corn and 60 M for wheat, thus preventing the use of smaller cars although the railroads might have on hand a supply of the latter and be unable to furnish cars to meet the requirements of the minimum rules.

Following the convention Henry L. Goemann, chairman of the transportation committee of the National Association, had a conference with the official classification committee of the railroads and the matter was put up to the Interstate Commerce Commission. After reviewing the whole subject, Commissioner Clark has issued this notice which is published in supplement 9 to official classification No. 38, and is effective December 26:

"Note 1. In ordering cars for grain the minimum carload weight of which is subject to this note, the shipper must order these cars of weight capacity equal to or in excess of the minimum carload weights prescribed.

"Whenever practicable cars of weight capacity equal to or in excess of the minimum carload weight prescribed will be furnished, and when available they must be used.

"If the carrier is unable to furnish a car of weight capacity equal to or in excess of the prescribed minimum carload weight, and a car of less weight capacity is available, such smaller capacity car will be furnished and the minimum weight to be charged therefor will be its market capacity, but in no case less than 40,000 pounds."

In announcing the ruling Secretary John F. Courcier of the Grain Dealers' National Association states that it will make available for use thousands of small capacity cars, thus facilitating the movement of grain from now until the present car shortage is relieved.

BIG ELEVATOR CERTAIN TO BE BUILT

According to a prominent railroad man, there will not be an elevator built by the Soo road at Superior, Wis., as was reported recently. The reason why the company has definitely decided not to erect the elevator is because the Great Northern Railway is going to build a big storage house, capable of holding 8,000,000 bushels of grain. The latter report has several times been denied, but the withdrawal of the Soo road is taken to mean that the Great Northern elevator is a certainty.

The erection of the big new elevator, it is estimated, will so increase the storage capacity at the head of the lakes as to make additional facilities for handling grain entirely unnecessary in the immediate future. The same authority, however, states that the Soo road will construct an additional elevator as soon as conditions warrant it.

The Corn Supply for Kentucky Whiskey

Large Quantity of Corn Brought in from Outside the State for Distilling—Methods of Inspection and Primary Requirements—Premiums for High Grades Not Unusual—Treatment of Corn at Louisville

By G. D. CRAIN, Jr.

As those familiar with corn markets know, Kentucky, in the maintenance of her ancient and honorable lead in the industry of turning good, sound corn into the finest whiskey in the world, and sending the ripened product to the four corners of the earth (and some others as well), has long since passed the point where her own soil produced enough grain to supply her needs for this purpose. In the days when every neighborhood had its little distillery, and the private manufacture of whiskey was not confined to the remote fastnesses of the Blue Ridge, the makers of the potent sour-mash stimulant probably found enough corn in their immediate vicinity for their operations; but the industry, years ago, reached such proportions, and the manufacture was carried on upon so large a scale, that even were Kentucky more of a corn state than she is, it would probably be necessary to go outside for the greater part of the grain used.

Practically all of the corn used in the distilling industry in Kentucky, as well as a great deal of that destined for distilling and other uses further South, passes through and is graded at Louisville; and, inasmuch as the dealers at that point sell most of their corn to the distillers, the requirements of that large and important body of consumers naturally cut a considerable figure in the grading and selling rules of that market. The State inspection, which is the accepted grading with most of the Kentucky distillers, is one of the most strict and rigid in the country, and corn which had come from other shipping centers as of a certain grade will very frequently fall far below the supposedly corresponding grade at Louisville.

Aside from the strictness of the inspection itself, there are certain rules governing the grading of corn at the market referred to, which necessitate better grain for a given grade than elsewhere. For example, at Chicago and other initial markets, corn which tests no more than 19 per cent of moisture is passed as No. 2, whereas at Louisville the test must not show more than 18 per cent. It is asserted by dealers at the latter point that corn has come to them, from outside of the State, graded as No. 2 which would not pass local inspection at better than No. 4, and that very frequently the alleged No. 2 fails to get better than a No. 3 rating at Louisville, partly by reason of the smaller moisture requirement referred to.

The primary requirement of corn for the use of the distiller is that it shall contain a high percentage of saccharine; and it has become axiomatic that the higher the percentage of water, the lower will be the percentage of saccharine. This proposition, while not as simple as it appears on its face, is still well-tested in whiskey manufacturing, and renders the test for moisture one that is even of more importance to the distiller than to those requiring corn for other purposes.

The weight of the corn is also regarded as an infallible test. Not only is it true, of course, that the dryer the corn is, the greater its weight, for a given volume, thereby making the weight a pretty good index to the relative amount of moisture, but also the heavier, more solid corn is almost certain to contain a larger proportion of sugar, the essential element in the production of the alcohol constituent of whiskey, than light-weight stuff, even of an equal moisture test. Fifty-six-pound corn, which is the weight of the best No. 2 grade, sun-dried, is therefore as nearly ideal as the whiskey manufacturer could hope to find, and if he could get all of this sort of grain he needed to meet his requirements, his troubles on the score of raw material would be settled.

And for such corn as that described, or corn ap-

proximating that degree of perfection, the distiller is willing to top the market prices by 1½ or 2 cents a bushel, or even more, if necessary. In fact, grain which exactly suits the requirements of the whiskey trade can almost command its own price, within reasonable limits. The reason for this is not especially difficult to understand. Consider, first, the fact that a high grade of corn, one approaching perfection from the distiller's standpoint, will make, with the other necessary ingredients used, a maximum of 4.80 to 5 gallons of whiskey to the bushel. Poorer corn will make from three gallons a bushel upward, depending upon its quality. Then consider the fact that the liquor produced has a value to the distiller of sixty cents a gallon or thereabouts as soon as it is made, and the difference of a few cents a bushel in the price of the grain sinks into insignificance, even on large orders, in comparison with the relatively enormous difference in the value of the products of good and poor corn.

But here, as elsewhere, there is plenty of room at the top. At no time has the supply of really high-grade corn ever come within anything like reaching distance of the demand. Yearning for 56-pound corn the manufacturers must perforce be content with grain weighing from three to six pounds less. Desiring it fully matured and sun-dried on the stalk, this ideal must be discarded under the practical necessity of using corn which has matured under unfavorable conditions, was harvested before being allowed to ripen fully and reaches the market containing 20 to 25 per cent of moisture. Such corn as this must be kiln-dried before it is usable in the manufacture of whiskey, and this adds a cost proportioned upon the amount of moisture to be dried out.

For taking out four per cent. of moisture a charge of one cent a bushel is made, with an additional charge of a quarter of a cent per bushel for each additional per cent eliminated, making the charge for the reduction of corn which shows 26 per cent of moisture, for example, down to the required 18 per cent, showing, two cents a bushel. Some distillers require their corn to grade equal to No. 2 as to the moisture test; that is, they will use only grain containing 16 per cent moisture or less.

The various public elevators at Louisville maintain drying, cooling and fanning apparatus where corn may be dried; and the same equipment is used in the treatment of grain which has started to heat. If the deterioration has not gone too far some of the corn, in which heating has begun, may often be so far redeemed for the purposes of the distiller that it can be used in small quantities, with the better grades. When it can be brought to a point where it contains slightly more than 20 per cent of moisture, a "sample grade," it can be used in this manner in relatively small quantities, although the grades used generally in distilling must be much drier than this.

The drying is accomplished by means of heat applied through steam coils, which maintain, in the chamber where the corn is placed for this purpose, a temperature of 180 degrees. Four or five per cent of moisture can be dried out in about twenty minutes, a correspondingly longer period being required to produce drier grain up to a point where any further drying would amount to roasting, which is hardly desirable for any purpose. In the drying kiln there are also installed large fans, operated by the steam power of the plant, which assist in the drying process. The grain is carried to the kiln or drying room by a belt-conveyor system, as a rule, which is operated by electricity; is chuted thence to the cooling room and from there

conveyed to the elevating mechanism by belt conveyors for handling in the usual course of the trade.

The average public elevator can handle from 30,000 to 40,000 bushels of corn a day in its drying equipment, and it is usual for distillers, or the dealers having orders from distillers, to await the accumulation of a sufficiently large quantity to give the elevator a run of some length for its drying department before having their grain treated, as a higher charge is made for small quantities. Some of the private elevators also have drying plants, which, as elsewhere, are used for drying other grain besides corn, for the general purpose of preventing deterioration by reason of the presence of excessive moisture, but the private concerns usually handle only their own grain.

The almost invariable necessity for drying corn purchased in the fall and early winter months has resulted in the distillers, as a rule, avoiding the additional cost of drying, and the less satisfactory results obtained from artificially-dried grain over the sun-dried, by not beginning operations until toward the end of the winter, when corn can be obtained which has had a chance to dry out thoroughly in the cribs and elevators. The usual output of the distilleries of Kentucky amounts to something over 40,000,000 gallons a year, running last year to about that figure, while the year before approximately 46,000,000 gallons were produced.

During the current season, however, it is predicted by experts that the production will be nearer 50,000,000 gallons. This prediction is based upon the fact that distillers are making preparations to take advantage of the low price of corn resulting from the great crop raised this year. It is a measure of obvious economy to make all the whiskey possible when corn is selling at 51 cents a bushel, which is the present price of a good No. 3 grade on the Louisville market, rather than wait and buy the same sort of corn and make no better product at a cost of 89 cents a bushel, which was the high figure last year. This rush to use cheap corn this season has resulted in an unusually early beginning of distilling operations, although nearly all corn purchased has to be kiln-dried.

Figuring four gallons of whiskey as the product of one bushel of corn, the estimated output for this season will require in the neighborhood of 12,500,000 bushels of good corn, and when it is considered that this very respectable quantity of grain is used in a single industry, returning to the growers some-

now yellow Missouri corn has the call, and has had for a season past.

Growers as well as dealers should learn that in order to meet the requirements of this far from unimportant market, particularly with reference to the whiskey trade, and to obtain the premium above the market price which distillers are ready and anxious to pay for a high-grade article, a little more than usual care must be exercised. It is not enough to get the most out of the land by careful cultivation; the soil should be fertilized and nursed to its primal richness. If it is impracticable, by reason of a wet fall, to dry the corn thoroughly on the stalk, storage facilities which will permit it to dry thoroughly in the crib should be provided. Every precaution should be taken to avoid shipping in a condition that will cause heating, and

ADDITION TO MONTREAL ELEVATOR

An addition will shortly be built by the John S. Metcalf Company, engineers, of Montreal and Chicago, to Harbor Commission Elevator No. 1 at Montreal. The contract calls for a building of reinforced concrete and steel to have a capacity of 1,500,000 bushels. The new storage addition will cost approximately \$700,000, and when completed will give Elevator No. 1 a total capacity of 2,500,000 bushels.

PROCESS OF MAKING GOOD SEED WHEAT

The propaganda of good seed is spreading rapidly through the various agencies which have been set in motion from the office of Bert Ball, Chicago, secre-



A MIXTURE OF WHEAT, OATS, WEED SEED AND DUST.

dealers at the initial markets should, for their own interests, see to it that their corn is strictly graded, so that inspection at the point of consignment will not result in the necessity of regrading considerably lower.

Proper care on these points and others that might be mentioned, to the end that the corn grown shall be of the best and shall arrive on the market without deterioration, will not only assure the highest prices, but will prevent that friction between markets and dealers which now occurs so frequently. Want of such care has very frequently resulted in the necessity of first-hand purchases, here and there, by many large distillers; and while this may guarantee to the particular firm so pur-

tary of the Crop Improvement Committee of the Council of Grain Exchanges.

In his annual report before the council in Chicago on January 17, he will state that since the Sears-Roebuck fund has been secured the organization of some one hundred and twenty-five counties has been completed and over one hundred men are under contract to extend the crop improvement work.

The accompanying illustrations show a part of the method employed by the agents, in their lectures before the farmers, for arousing a sense of the need of cleaning their seed grains. These pictures are thrown upon a canvas and furnish a literal illustration of the appearance of a quantity of spring



CONSTITUENTS OF MIXTURE SHOWN ABOVE AFTER BEING CLEANED AND SEPARATED.

thing like \$6,000,000, it will be seen that the business of making the finest whiskey in the world is by no means a small one.

The continual cry of the distillers, however, is for better corn. The assertion is made by dealers specializing in whiskey grades in the Kentucky market that Indiana and Illinois grain is no longer up to the necessary standard, due to the deterioration of the land. New land, or land equivalent to new in richness, is required to produce corn having the qualities which make good whiskey; and so the demand has run from state to state, sometimes following the trend of farming westward and sometimes selecting the product of a single county, in a fortunate season, which chances to meet just the particular requirements of the whiskey trade in weight, color, dryness and saccharine qualities. Just

chasing that it will receive just what it wants, or as nearly that as the market affords, the logical and economical method is the handling of large quantities, properly—that is, reliably—graded from market to market. Any tendency to the contrary is in its nature reactionary and is the result of conditions that should not be permitted to exist.

The Canadian Pacific Railway during the height of the season was loading a total of 1,000,000 bushels of grain per day. This rate was maintained until the company was forced to slacken the loading, because the grain was going into Fort William faster than the boats were taking it out. The reason the boats did not take it out faster was because the shippers were unable to secure ocean tonnage to move to Europe.

wheat before cleaning and the resultant fine-looking berries after the cleaning process is over.

The first illustration shows a mass of wheat mixed with oats, weed seed, dust and trash, while the second illustration portrays the separate piles of what is contained in the whole, or rather shows what is accomplished by cleaning the seed. No. 1, in the latter cut, shows the wheat screenings after the grain is cleaned. No. 2 and No. 3 are the oats that have been eliminated. No. 4 shows the uniform wheat berry and in No. 5 is seen the weed seed and trash.

These pictures, and other similar ones, which are in the hands of those engaged in the crop betterment movement, graphically point out to the farmer the actual necessity for seed cleaning and the desirable results to be obtained.

Commission Holds Elevation Allowances Legal

Decision Finally Made in Well Known Gund Case by Interstate Commerce Commission—Ruling Made That Elevation Allowance to Competitor by Railroad Is Not Undue Discrimination

A decision of great moment to the grain trade of the United States has been handed down by the Interstate Commerce Commission in the form of a supplemental report in the case of H. Gund & Co. vs. the Chicago, Burlington & Quincy Railroad Company. At the original hearing complainant asked reparation upon all grain passing through its country elevators at interior points in the state of Nebraska, which grain was shipped through Missouri River points to eastern destinations, upon the ground that an elevation allowance was made by defendant to complainant's competitor (the Duff Grain Company) for elevation-in-transit at Nebraska City. Action by the Commission was deferred pending decisions of the United States Supreme Court in the *Elevation cases*. In conformity with these decisions the Commission has been compelled to rule that the discrimination complained of was not undue or unreasonable and dismisses the case. The supplemental report, written by Commissioner Lane, is as follows:

A report in this case has already been rendered, 18 I. C. C., 364, the closing paragraph of which read:

What is above said with regard to the view that the purpose and effect of these allowances is to cause through rates to be greater in amount than the sum of the locals was not discussed at the hearing or argument in this proceeding. It would be improper, therefore, to base any award of reparation thereon. No dismissal of this complaint will be made, inasmuch as this would cause the statute of limitations to run against complainant's claim. It will be held for further action when the decision of the Supreme Court upon the matters here involved shall have indicated the power of the Commission in the premises.

The facts are set forth in the previous report and need be but barely outlined here. Gund & Company are grain buyers who own and operate elevators at interior points in Nebraska on the line of the Chicago, Burlington & Quincy Railroad. The Duff Grain Company is a competitor in the purchase of grain and owns an elevator in Nebraska City, Nebr., a point where the railroad of the defendant crosses the Missouri River. At this point for several years the defendant made an elevator allowance to the Duff Grain Company of three-fourths of a cent per 100 pounds upon grain passed through the Duff elevator. Gund comes now and says that it was illegal to do this inasmuch as it effected a discrimination in the rate in favor of the Duff Grain Company and against Gund & Company, and asks that reparation be awarded to it in the amount of three-fourths of a cent per 100 pounds upon the grain which Gund & Company shipped through Nebraska City and which did not receive an elevator allowance.

In view of the recent decisions of the United States Supreme Court in the *Peavey case*, 222 U. S., 42, and *Updike case*, 222 U. S., 215, the Commission called upon the parties hereto to file briefs setting forth their views as to what order should now be entered in this proceeding. The complainant takes the view that the Supreme Court has held that where an elevator renders service to a carrier connected with transportation or furnishes any of the instrumentalities used in transportation the railroads may pay for such service or facility what it is reasonably worth, and that the Commission may determine whether the elevation was a service to the carrier in connection with the transportation, saying:

The basis, then, on which the carrier may pay elevation charges is "services received" or "instrumentalities used" in connection with transportation. Ergo, if the elevation is not a service to the carrier, but only an advantage to the owner of the grain, the carrier may not pay for it. If the instrumentality used is used by the owner of the grain for his own purposes and not for the purpose of facilitating transportation, the carrier may not pay for it. If, in either case, the carrier pays he thereby gives an undue advantage to the person receiving the payment over that person's competitor who does not receive such a payment.

Now, apply this reasoning to the * * * case before the Commission. The Duff Grain Company bought at various stations west of Nebraska City, in competition with the complainant; shipped this grain to Nebraska City, a way station on the line of the Burlington. * * * After the grain had been elevated and treated as the owner desired, the railroad company was required to switch another car to receive the grain. * * * All this having been done, the car was again started upon its journey. In all this extra work done by the railroad company in the elevation of the grain and the reloading of it by the elevator company, it is impossible to discover a single particle of service to the carrier, or the use of a single instrumentality that was of any benefit whatever to the carrier. Everything done was for the sole use and benefit of the Duff Grain Company, and for the railroad to pay for it was certainly to unduly discriminate in favor of the grain company and against the complainant.

* * * All that the Peavey and Updike cases decide * * * is that where services are rendered to the carrier in connection with transportation, the mere fact that benefits incidental thereto result to the owner does not make it improper for the carrier to pay for the services. But where there are no services rendered to the carrier the payment would be illegal. In other words, the Commission and the Court differ only in this: The Commission forbade elevation allowances in all cases; the Court says they are legal where services are rendered by the elevator to the carrier, or where instrumentalities belonging to the owner of the grain are used by the carrier. The Court does not say that elevation allowances are proper in all cases. On the contrary, the clear meaning of the decisions are that they are not proper in all cases, and are proper in no case except where it can be shown that the "service" was rendered to the carrier.

* * * In the case at bar it must be clear that there were no services rendered to the carrier, and, hence, that the allowance was improper. To the extent that it was improper, it was in effect a rebate, a discrimination in favor of the Duff Grain Company against the complainant.

To this position the defendant urges that under the Supreme Court decision, the admission by the complainant that the acts performed by it do not constitute a transportation service disposes of its right to any allowance for elevation. As to the contention that the allowance be made by the railroad to the Duff Grain Company at Nebraska City was illegal and a rebate, defendant says:

Argument would seem to be unnecessary upon the proposition that a rebate having been paid to one shipper, the Commission will order the carrier to pay a rebate to any other shippers.

It should be borne in mind that complainant's position is that the payments to the Duff Grain Company were illegal and were not for transportation services and were rebates. If this be conceded for the sake of argument, we do not understand that the Commission will direct us to violate the law further by paying rebates to complainant. The reason for the payments to the Duff Grain Company and defendant's justification thereof are fully set forth in our former brief.

Defendant's justification as given in its former brief may be summarized in this wise: The right to make elevation allowances to terminal elevators of transfer houses rests upon the claim heretofore urged with success before the Commission that these houses furnish appliances used in, and perform services connected with, the transportation of grain. The Burlington road originally took a position opposed to elevator allowances at the Missouri River.

After having contested the issue unsuccessfully before the tribunal having exclusive jurisdiction over the subject matter of elevation allowances and full power to determine the validity and fix the rates of allowances for the services so rendered in the transportation of grain, the Burlington was forced to yield to the authority of this Commission. Upon the taking effect of the order made on rehearing reducing the allowance to three-fourths of 1 cent the Burlington issued, filed, and published the elevation tariff in conformity thereto, which took effect July 19, 1907. It had then been operating one year and two days in defiance of the competition of the Union Pacific without an elevation tariff and without making payment of any elevation allowance, at a disadvantage and at a necessary loss both of patronage and prestige. The involuntary elevation tariff thus lawfully established by the act of Congress, through the agency of this Commission, to which was delegated the administrative duty of determining what rate met the legislative standard of a charge and allowance that "shall be no more

than is just and reasonable" is the sole foundation of the complaint under investigation.

Thus we see the position of the defendant to be that against its own wish, but to meet competitive conditions growing out of the fact that the Union Pacific Railroad Company at Omaha was making an allowance, which at first the Commission recognized, the Burlington gave a similar allowance at Nebraska City.

The contention of the defendant is that—

The ruling in the Washer Grain Company's case, 15 I. C. C., 147, compelled the Missouri Pacific to put all terminal houses situated at different points on the Missouri River upon an equality. Restitution was awarded to a terminal house at Atchison for elevation allowances equal to those paid at Kansas City and Coffeyville. The ruling justifies the payment of elevation at Nebraska City by the Burlington, while making like payments at Omaha. Indeed it would have been an unlawful discrimination against the Duff Grain Company to have refused it payment of elevation allowances at Nebraska City so long as the Burlington had an elevation tariff in effect at Omaha.

The Supreme Court was appealed to, and it recognized the right of a carrier to pay a shipper for a service that it rendered incident to the transportation; that is to say, if the Union Pacific wished to secure the release of its car by having the grain put into an elevator at Omaha, it could make a reasonable allowance therefor.

Our conclusion is that by reason of the allowance made to the Duff Grain Company at Nebraska City which was not extended to the complainant at its interior elevators there was effected a discrimination which was harmful to the complainant. We, however, can not hold that this discrimination was undue or unreasonable under the third section of the act, because, as we understand the decision of the Supreme Court in the *Peavey case*, *supra*, a railroad may for competitive reasons grant an elevator allowance although no transportation service is rendered by the shipper owning the elevator. We quote from the opinion in that case at page 48:

The Union Pacific made the allowances in question to elevators at its termini; it had no motive to make them anywhere else. The competitors of the Union Pacific concerned in the Duffenbaugh case were compelled by competition to make the same allowance at Missouri River points, but they also make it nowhere else. The Traffic Bureau, Merchants' Exchange of St. Louis, complained to the Commission that the result was a discrimination against St. Louis of three-fourths of a cent per 100 pounds. But the principle of the decision is that the allowance to elevators upon their own grain is to be stopped everywhere unless they are prevented from using the opportunity for treating their grain. Therefore this question of preference between cities does not need to be discussed. But, as remarked below, the Union Pacific could not be complained of on this ground, 176 Fed. Rep., 424, and it would be impossible to deny the same right to competing roads, merely because as the result of the conditions one city would gain and another lose. *Louisville & Nashville R. R. Co. v. Behlmer*, 175 U. S., 648.

Applying this reasoning to the present case, it must follow that the Burlington road, having the right for competitive reasons to make an elevator allowance at Omaha, although no transportation service was rendered by the elevator, also had the right to extend such an allowance for similar competitive reasons to Nebraska City, a competing point. An order of dismissal will be entered.

ADDITIONAL STORAGE AT KANSAS CITY

Work has been commenced on the erection of a reinforced concrete terminal elevator for the Chicago, Rock Island & Pacific Railway at Kansas City, Kan. This new elevator is located in the railroad yards near the Seventh street viaduct and adjacent to the present steel terminal elevator. It is to have a capacity of 1,000,000 bushels and will be operated by the J. Rosenbaum Grain Company of Chicago in connection with the present house. The new elevator will form one of the most important additions to the grain storage capacity of Kansas in recent years.

The building will be equipped with a large handling capacity for receiving from and loading grain to the railroad cars. The elevating capacity will permit of the handling of two hundred cars per day in and out, in addition to the capacity of the present plant and will be worked as a unit with the steel elevator. There will be four elevator legs of 12,000 bushels capacity each, which may be used simul-

taneously for receiving or shipping. The dryer capacity will be largely increased, and interchangeable belt conveyors will be established between the two buildings, so that grain can be transferred from one building to the other and loaded out of either building.

The present steam plant, 500 horsepower, will be converted into electric transmission, and both buildings will be fully equipped with electrical trans-

mission direct connected throughout. The new elevator will have all the latest and most modern conveniences for operation and economy in working. The contract for the plant was awarded to the MacDonald Engineering Company of Chicago, Ill., who are now at work on the foundations, with a view to having the entire equipment in operation by the first of next July and be fully ready to receive the new crop.

New Grain and Bean Elevator at Saginaw

Embodies All the Latest Features of Construction—Has Concrete Foundation Resting on Piles—Modern Elevating and Conveying Machinery—Efficient Equipment For Cleaning and Weighing—Steam-Heated and Electrically Driven

The tallest structure in Saginaw, Mich., is the new fireproof, concrete grain and bean elevator recently completed by the Saginaw Milling Company for C. K. Eddy & Sons. It was built by the Burrell Engineering & Construction Company, of Chicago, from plans drawn by them, and rises to a height of 136 feet, with ground dimensions of 182 by 50 feet. The storage capacity is 200,000 bushels in bulk and an additional 50,000 bushels in bags can be stored in the warehouse.

In addition to the building above the ground there is a basement 10 feet in depth, which has under it

capacity for handling 10 carloads of beans and 20 carloads of grain daily. There is a Hess Drier for both grain and beans, and mechanical and hand-picking machinery.

The mechanical pickers are located upon the second floor. Beans are taken from the bins, picked and polished and re-elevated to the bins for sacking or storage.

Beans which are to be hand-picked are elevated to the picking bins on the second floor, from which they are spouted to the pickers. After the work is done here they go to the receiving bins beneath,



A MODERN CONCRETE ELEVATOR RECENTLY BUILT AT SAGINAW, MICH.
Designed and Erected By the Burrell Engineering and Construction Company, Chicago.

a solid slab of concrete over the entire area. The concrete rests upon 1,000 piles, which serve as the foundation.

Grain is received from cars into an elevator leg. It goes first to a Fairbanks Scale and is then conveyed to the cleaners, from where it is taken by the lofting elevator and deposited into bins. Beans are handled in the same manner, passing through the receiving leg to the cleaners and from there to the lofting leg, which discharges into the bins.

A 50-horsepower boiler is in the basement, which supplies steam for the ventilating system as well as for the grain and bean driers.

The machinery equipment of the elevator gives a

from which they are either sacked and taken to the warehouse to be loaded into cars or else transferred by the conveyors to bulk storage.

All the bean-cleaning machinery was furnished by A. T. Ferrell & Company, of Saginaw; the grain-cleaning machinery by the Invincible Grain Cleaner Company, of Silver Creek, N. Y., and the conveying and transmission machinery by the Burrell Manufacturing Company, of Bradley, Ill.

All machinery is electrically driven, each machine being provided with an individual motor. This is one only of the many features which make this a thoroughly modern, perfectly equipped grain and bean elevator.

DISCOUNTING GRAIN UNDER PRESENT MOISTURE TEST CONDEMNED

That the present system of corn valuation based upon the moisture test is unfair, seemed to be the opinion of the members of the Farmers' Institute of McLean County, Ill., at a recent meeting. To make clear the position of the producers upon this important question, a resolution was adopted. The subject is one that has been actively discussed for some time among grain shippers, but this is the first instance of direct action being taken by the farmers. It will be remembered that at the convention of the Illinois Grain Dealers' Association held in Peoria last June, President Metcalf in his annual address stated that the question of making slight fractional percentages the excuse for enormous discounts was a live and powerful issue. The past year has been the first wherein discounts on off grade corn have been graduated to any extent. The farmers were following out this same line when they passed a resolution presented by W. C. Darnall, reading as follows:

Resolved, That the present system of discounting grain values based on the so-called moisture test, is unfair to the owner of the property, and every legitimate effort should be exerted by farmers to force such correction in the practice as will result in discounts being taken that will be equitable to both grower and miller.

Resolved, That we call upon all local grain dealers to support us in this contention, to the end that the farmer whose corn tests 19.26 per cent moisture shall not be obliged to accept the same discount as the farmer whose corn tests 21 per cent moisture.

Resolved, That a copy of these resolutions be spread upon the records of this meeting, another copy furnished the press for publication and a third copy sent to the secretary of the Illinois Grain Dealers' Association for the information of the grain shippers as to the position of the farmers on this important matter.

Mr. Darnall is a member of the firm of Darnall & Spence of McLean, and is a very prominent grain man in McLean County. Mr. Darnall's idea is to cut the price down gradually as the moisture test goes up and not two cents all at one jump. The same per cent of moisture can be held for distinguishing the different grades. The suggestion is made that for every $\frac{1}{2}$ per cent of added moisture, $\frac{1}{2}$ cent be taken off.

COTTON SACKS TO BE USED IN NORTH- WEST

The question of whether grain shall be handled in bulk or in bags has long been agitating the farmers of Washington and other Pacific Coast states. It seems, however, in Washington at least, to have been brought to a more definite head this year, because many of the farmers' unions have endorsed the bulk system of handling grain, and others have compromised by substituting cotton sacks for the jute bags.

From the earliest agricultural settlement of the Pacific Northwest the grain crop has been handled in jute bags instead of in bulk through warehouses and elevators, as in other sections of the United States. There was, of course, an original reason for this practice. In early days practically all the crop beyond the little required for home consumption, was exported in sailing vessels to Liverpool, and the long voyage around the Horn would not permit its shipment in bulk in vessels of that type. Danger existed that in a rough sea the ship might shift cargo, and it was held that the grain would suffer injury, if carried in bulk through a voyage lasting several months.

For another reason, the country was in a primitive state when the first cargoes were sent to the European markets. Railroads had not been built nor warehouses erected. To reach the ships at Portland, the grain was hauled over rough roads, much of it direct to the vessel, and later to points on the river bank where steam boats could make natural landings and take on a few sacks from one place and a few sacks at another point.

Under these conditions it was necessary that the grain be sacked at the farm, and that practice has come down through all the intervening years. In spite of the building of railroads, the erection of warehouses and the steady diminishing proportion

of grain carried to the Liverpool market, the grain producer must bear a heavy burden every year in the purchase of sacks.

It is estimated that the grain sack bill for 1912 of eastern Washington alone amounts to \$2,000,000. The wheat crop of eastern Washington for 1912 is 35,000,000 bushels, as estimated by the state grain inspector, and to sack it more than 16,000,000 bags are required. At 10 cents a sack these cost the farmers \$1,600,000 for wheat alone, not to mention the great sums that must be expended also in sacking oats and barley.

At some of the farmers' meetings it was urged that cotton sacks be used as a substitute for the more expensive jute bags and samples of the cotton bags. There seemed to be a great many, however, in favor of eliminating the sacks altogether, pointing out that it would mean a saving of at least three cents per bushel. It was also brought forward that it was unfair to make them buy sacks on the plea that the grain must be sacked for export when only a small per cent ever leaves the country. They would not object to sacking the amount needed for export, if the sacking stopped with that, but instead they must sack millions of bushels used at home and, moreover, as soon as the Panama Canal is completed there will be no excuse for sacking even for export.

The opponents of the bulk system say that the change has been tried several times in the Northwest and always with disastrous results. The Pacific Coast Elevator Company built elevators at one time, a co-operative company built them at various points in the Big Bend country and at least one other company put up elevators in the Palouse country. These have all been discarded and most of them have burned down and are forgotten.

For the next year at least the question seems to be more or less definitely settled by the recent action of the Washington-Idaho Farmers' Union, in deciding to purchase cotton sacks. It is planned to buy 10,000,000 cotton grain bags and orders for them will be placed in the South.

NEBRASKA CO-OPERATIVES CONSIDER LEGISLATIVE PROBLEMS

More than one hundred and fifty farmers were in attendance at the tenth annual convention of the Nebraska Farmers' Co-operative Grain and Live Stock State Association held in Omaha on December 17 and 18. In addition to routine business various legislative problems took up most of the time allotted to the sessions. A bill now before the Nebraska legislature establishing a development and public welfare commission with adequate funds for research and publicity work was enthusiastically endorsed by the body. This bill provides that five men be appointed members of the commission with power to increase their own number to nine. The commission will have a direct association with the state university agricultural department and will promote the agricultural interests of the state and see that the work is given proper publicity.

Other legislative recommendations adopted were as follows:

First—Resolved that the Farmers' Co-operative Grain and Live Stock Association recommend to the legislature the passage of a law requiring all railroads doing business in Nebraska to connect their rails with every other railroad at junction points, and to require the railroad companies to route freight through by the shortest route when requested by the shipper, at a rate not exceeding the distance tariff in force over any single line for like distance, or not exceeding the published tariff rates of any railroad operating in Nebraska for like distance.

Second.—That we ask an amendment of the Nebraska co-operative law by adding the words, "or to members and other customers" after the word "members" in Section 1 of said law, making the amended section read as follows:

Section 1. For the purpose of this act the words "co-operative company, corporation or association" are defined to mean a company, corporation or association which authorizes the distribution of its earnings in part or wholly on the basis of or in proportion to the amount of property bought from or sold to members, or to members and other customers, or of labor performed, or other services rendered to the corporation.

Third.—That we request the legislature to pass an amendment to the Nebraska "unfair discrimination" law similar to section 2 of the South Dakota statute

on the same subject, making it obligatory on the attorney general to enforce the said law in the manner set forth in the South Dakota statute, which reads as follows:

"Section 2. Duty of the attorney general: If complaint shall be made to the attorney general that any corporation is guilty of unfair discrimination as defined by this act he shall investigate such complaint, and for that purpose he may subpoena witnesses, administer oaths, take testimony and require the production of books or other documents, and if in his opinion sufficient grounds exist therefor he may prosecute an action in the name of the state in the proper court or annul the charter or revoke the permit of such corporation, as the case may be, and to permanently enjoin such corporation from doing business in the state, and if in such action the court shall find that such corporation is guilty of unfair discrimination as defined by this act, such court shall annul the charter or revoke the permit of such corporation, and may permanently

GUY M. FREER

The life of a traffic manager is not considered to be an easy and tranquil one. He is subjected daily to thousands of little annoying details and vexatious problems which must be worked out satisfactorily, and it is not a cause of very great wonder that he frequently loses most of the kindly and



GUY M. FREER.

gentle traits with which he was originally endowed. One of the few exceptions to this rule is Guy M. Freer, traffic manager for the Cincinnati Chamber of Commerce, who never, apparently, shows a trace of trouble or care, and whose serenity of disposition is unmarred after years of active service. His friends (and their number is legion) point out that one of the chief reasons for the permanent "good fellowship" qualities of Mr. Freer is that he is so admirably fitted for the position which he occupies, and, looking over his past record, it would seem that there is more than a grain of truth in this. His experience in railroad work and along traffic lines has been very comprehensive, and by confining his energies strictly to the one particular line, his capability for traffic work was splendidly broadened and developed.

He is an Ohio product, having first opened his eyes in Niles, Ohio, in November, 1872, and within the first six months he decided that he liked the state. This liking developed so much that he has up to the present time confined his work entirely within the limits of Ohio. He entered railroad service in 1888, in the general freight office of what was then the Cincinnati, Washington & Baltimore R. R., and now is the B. & O. S. W. R. R. He remained in railroad work for twenty years, first working up to the position of chief clerk in the general freight office of the B. & O. S. W. R. R., and later being made general agent of the C., A. & C. Ry. Still later he became commercial agent of the Ohio River R. R. and Pennsylvania Lines West, and commercial freight agent of the B. & O. R. R.

Mr. Freer left railroad service in 1908 to accept the position of traffic manager for the Chamber of

Commerce, Columbus, Ohio, after which he became commissioner of the Receivers' and Shippers' Association of Cincinnati. On November 1, 1912, this body was merged with the Cincinnati Chamber of Commerce and Mr. Freer took up the duties of manager of the traffic bureau of the combined organization, which position he most ably fills today.

CONDITIONS OF GAS ENGINE OPERATION

Many of the conditions prevailing during the running or operation of the gas or gasoline engine are not generally understood, and in view of the importance which these engines are assuming in connection with elevators and mills, some facts pointed out by a writer in the *Blacksmith and Wheelwright* are decidedly interesting. A few of these conditions, while absolutely essential to the success of the engine, are not manifestly present to every operator, and many a successful operator seldom thinks of them or has occasion to look closely into their existence.

For instance, many an operator is not aware of the fact that the velocity of the mixture as it passes through the valves into the cylinder is something like 4,000 to 5,000 or more feet per minute. And that the pressure during the inhalation stroke of the piston is a pound or more less within the cylinder than atmospheric pressure on the outside of the cylinder.

This fact accounts for the inrush of the air mixture so as to equalize the pressure within and without. At sea level the atmospheric pressure is 14.7 pounds to the square inch. This pressure is simply the weight of the atmosphere. And this weight or pressure is utilized or taken advantage of in the process of feeding and mixing the fuel of the gasoline engine. The fact that there is a pound or more less pressure within the cylinder while the piston is moving out on its inhalation stroke is evidence that when the stroke is ended the pressure within has not yet come up to the atmospheric point, and for this reason the inlet valve should be held open until the crank has passed the outer center by several degrees. This will give time to fill the cylinder completely by a full inhalation, and compression will begin as soon as the valve closes.

Gas engine operators, especially those just beginning, often wonder why it is necessary to cause the spark to be made so far in advance of the end of the compression stroke. This is because it takes time even for a high explosive mixture to build up its ignition and combustion, and since the piston of the gas engine travels at a high rate of speed, it will complete its compression stroke and start on its power stroke in a very short period or space of time. And by giving the ignition the advantage of sufficient lead, it will be ready with its highest degree of heat and greatest expansion by the time the piston is ready to start on its power stroke.

This insures the conversion of a liberal percentage of the heat energy into power. It also permits of complete combustion before the end of the power stroke and a consequent rapid heat reduction so that by the time the exhaust valve opens, the temperature is sufficiently low to prevent heat injury to the valve.

The degree of temperature in the beginning of the power stroke is excessive, something like 2,000 degrees Fahr. or more, but as the piston recedes the gases expand and both pressure and temperature diminish rapidly.

Because of this excessive temperature, provisions are made through the means of radiating and cooling devices to prevent the high temperature from burning the lubricating elements, injuring the valves, etc., by the absorption of much of the heat. It is known that about 50 per cent of the heat generated by the explosions is lost through absorption by the water radiating system. If it were possible to lubricate and otherwise avoid injury to the engine without this absorption, all this energy might be converted into power and the power output be more than doubled from the same quantity of fuel. The maximum temperature of the gasoline engine cycle is about four times that of the steam engine.

Work of A Boys' Agricultural Club

The Inauguration of a "Better Corn" Movement—Methods of Cultivation—Persistency and Enthusiasm of Youthful Contestants—Theoretical and Practical Work Involved

By H. WINSLOW FEGLEY

In Berks County, Pennsylvania, there are several thousand schoolboys who are wearing a peculiar button on their coats. The respective buttons have a far greater significance than any political button ever pinned upon a coat, for they have to do with the future of this great country of ours, and are worn by those who a decade or two hence will be "the men of the hour."

There are eight words on the button, namely: "Boys' Agricultural Club of Berks County, 'Better Farming.'" Then there are miniature pictures of barnyard scenes, of corn and vegetables and of farming implements, and around all this there is a great story connected.

Berks County has figured for several decades among one of a dozen leading counties in the United States agriculturally, and in the 1900 census it was one among the first half-dozen in such rank. In the county, agriculture has been the oldest industry, but during the last ten years it has been one of the newest sciences. In Biblical times the first two boys chose agriculture for their life work—one raised grains and fruits and the other sheep and cattle. In Berks County, ever since its earliest settlements, this Bible story has been repeated, and even today the thousands of school children are following in the same course, raising grain products, vegetables and fruit and raising better horses, cattle and poultry.

More than fifteen years ago Prof. Eli M. Rapp became the superintendent of the Berks County public schools. Prof. Rapp came from a farm, where by hard work and by constant devotion to his studies he managed to get an education that finally landed him in a country school as teacher, later as principal of a borough high school and still later to this present position.

The words "Better Farming" on the little but picturesque button which is the emblem of these

All over the United States there was a slogan of four words heralded for more than twenty years—"Back to the Farm." It worked quite well in some sections and in others it was a complete failure.



JUDGES EXAMINING THE CORN OF A CONTESTANT.

This young educator was a strong supporter of the Roosevelt Country Life Commission, which did some good work; and he has supported other good efforts in the same direction; but he was one of the

but that it is a nobler thing to keep that boy right on the farm from the time he wears knee-breeches to the day when he leads a girl belonging to the Domestic Science Club to the altar as his wife. Prof. Rapp, in his work, has organized Domestic Science Clubs among the girls, and their work in household and garden affairs is just as prosperous as that of their brothers.

When this work was introduced the superintendent enlisted every one of his teachers, about five hundred and fifty in number. A little circular was mailed to them explaining the formation of agri-

cultural clubs in the respective schools. It did not mean, however, that from henceforth agriculture should be taught from text-books and some other study sacrificed. Prof. Rapp is not very much in favor of the text-book agriculture, but has solved the problem by introducing the school to agriculture instead of the latter into the school. So all that was done in the schoolroom was a little theory work, and this was done during recess periods and at the noon-hour on rainy days, when outdoor recreations were not to be had. In this way over four hundred such clubs were formed. In some schools they were known as corn clubs, others called them poultry clubs, and so on, because some boys preferred raising poultry to big yellow ears of corn and others found more delight in big pumpkins, so they could have some extra fun on Hallowe'en with the boys who had abundant corn for this very same pleasure.

When the preliminary work was started Pennsylvania was scratching only the outer rim of her agricultural possibilities, and yet she had six counties that were among the thirty-four foremost counties in the nation, with agricultural products to the credit of Berks County of a value of \$5,000,000. The population of the county today is 183,222. It has 6,953 farms—1,792 farms containing more than 50 acres, 1,425 farms containing from 100 to 174 acres, and 325 have more than 175 acres of land and the rest less than 50 acres. The value of all this farm property is \$36,929,891.

Corn is the chief crop. There are 190,268 acres in improved farm land and 57,568 acres are devoted, on an average, to corn and the average crop is 1,193,332 bushels. Wheat is the second crop, oats third, potatoes fourth and rye fifth, with the rest scattered about equally among a dozen other crops.

Therefore it was thought wise to teach the boys not only to raise a large corn crop, but a better corn crop, and this is why some of the clubs are called corn clubs instead of only agricultural clubs, for in some school districts there have been great contests for raising improved corn.



STANLEY M. F. SAILER, FIRST PRIZE WINNER, IN HIS CORN FIELD.

clubs, meant a great deal to Prof. Rapp, and still more to the parents of those club members, and today, after the work is about eight years old, the results have been so far-reaching that there is no school superintendent in the United States, working among rural schools, whose work is better known and more greatly praised than the superintendent of the Berks County schools.

first to detect fault with the old slogan, and so he invented a new one: "Stay on the Farm."

This slogan works in Berks County, and the seed that is spreading to adjoining counties will soon, it is thought, blow across the borders of the state and germinate in other states. Prof. Rapp says that it is a grand thing to get a one-time farmer boy back from city life, to begin farm life anew;

For comparison, the work of the Stonersville school may be taken to illustrate some of the work of these clubs. This school is in charge of Oliver Sailer, a man who was born and raised on the farm. A club was organized among the boys numbering



STANLEY BURKHART, WINNER OF 1910 CONTEST.

about 15. They subdivided themselves into corn, poultry and vegetable workers. The corn boys during the first year hunted in the corn cribs for the best ears they could find and then asked their parents for a small piece of ground to raise their crop. The result was surprising, though it was an initial attempt. The next year proved to be a better one.

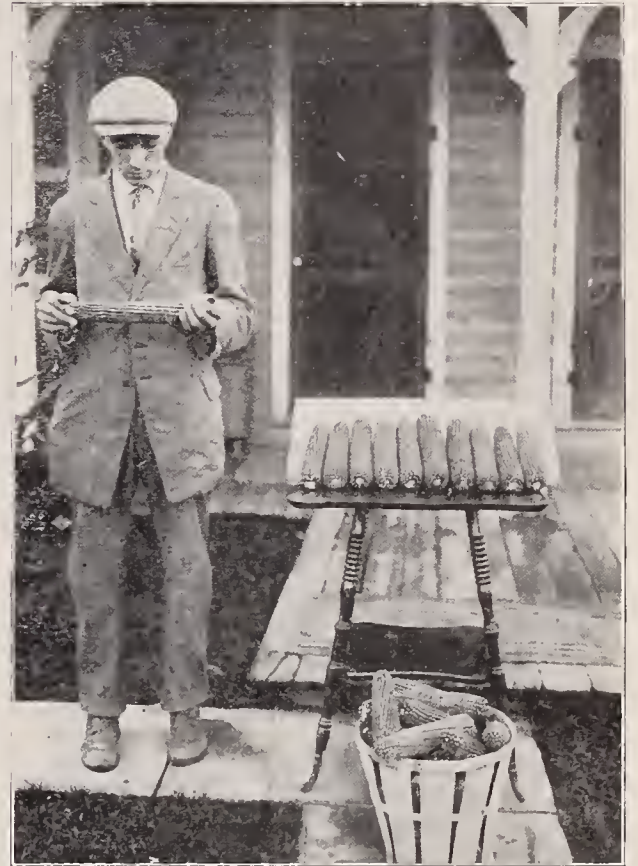
During the winter the theoretical work included the study of taking care of seed corn, how to test the kernels to find out which would sprout and which were inferior; the fertilizer and manure values for bettering corn crops proved another progressive feature, and then the final selection of the corn from the crop was made to be placed on exhibition for the purpose of winning the prizes. Scorecards were obtained from the State Experiment Station, and according to those rules the children selected their best ears of corn. The first year \$25.00 in prizes were offered; this was increased from year to year, until last year, when the first prize-winner for the best ten ears and the best ear received \$8.00, while there were many other prizes from \$1.00 to \$5.00 each. This school alone had five contestants in the corn race, so the magnitude of the contest can be imagined when other boys from 400 other clubs had boys in the race.

In speaking with one of the boys who belongs to these clubs, the lad said: "First, my teacher encouraged me to enroll as a charter member. Then I planted corn and began to raise poultry. The first corn was planted on a small piece of ground two rows away from the corn that my father grew. The corn was planted and cared for during the summer, and finally husked, and then came the disappointment, for it had not matured fully and I

failed to win a prize. I was, however, not discouraged, and the next year I tried again. I attended the County Teachers' Institute and listened closely to an instructor from Illinois, who showed lantern slides concerning corn raised by school children of his State. I went home and looked through all the seed catalogues I knew of, and then I sent thirty cents and got a pint of seed corn. I planted this seed corn in a square patch instead of two rows, as before. I used barnyard manure as a fertilizer, and the next fall when I took my ten ears of corn to the show, held at Reading, the county seat of Berks county, I won second prize and went home with a five-dollar gold piece. I picked my seed corn with greater care for the next event in 1909, and while there was a great drouth in the county, nobody had great success, but I carried water in a sprinkling can to my patch, and the next contest showed that I won the prize for the best ten ears and for the best ear. While I won the prizes and felt elated, I was not satisfied and I went at it again, not with the purpose of getting the prizes, but with increasing the acreage on our own farm.

"Berks County, as you know, hardly ever grows more on an average than 50 bushels of corn per acre, and often much less, while only a few are able to grow 100 or more bushels. Well, my average was less than fifty bushels, and so was the record of my father. Then I tried my best to see what I could do in a scientific test. I selected a quarter-acre, in which I planted 16 rows, three feet apart, $13\frac{1}{2}$ rods long. The kernels were dropped by a planter, one at a time, distance between grains ten inches, and used barnyard manure as the only fertilizer. The county superintendent appointed Mr. L. C. Kline, a teacher from another district, and Charles Boone, a progressive farmer, to judge the contest. The corn was cut on October 5 and husked the following day, when the two judges weighed it and found I had 1,584 pounds, regardless that the chickens spoiled some and the crows carried away several bushels. This was at the rate of 88 bushels per acre. Not wishing to go with my corn to the show this year, because I had already won the highest honor, the superintendent and the teachers and farmers of the community said that I had to enter the contest with my record back of me, and I finally carried the ten best ears—not the biggest, by any means, but those that showed quality and quantity—to the show; and when the judge, who came from

who has won prizes at those annual contests, it is said, can show a similar record, not only in good corn, but the figures, the data and the final result of all his work. Every member of those clubs must show his work in figures and must also write an annual essay, which has to be handed to the superintendent at the time the result is exhibited by the actual products raised and placed on the floor of



SELECTING THE TEN BEST EARS OF CORN.

the show rooms, which are always held at the time of the annual teachers' institute.

So far as the raising of corn is concerned, it has resulted in a wonderful change of methods of corn planting and raising. All the inferior kinds of corn have been eliminated from the county, and only good seed corn is used by the majority of farmers, and not until it has been thoroughly tested as to its value for this purpose through the germination process. Farmers are also using better fertilizers.



AN 11-YEAR OLD MEMBER AND HIS CORN PATCH.

the State Agricultural College, finally hung the blue ribbon to the ears, I found that I again won two prizes for the best ten ears and for the best ear. Then I was urged to send my corn to the State contest, and this result is not yet known."

This is the story of but one corn boy, whose name is Stanley M. F. Sailer, and every other boy

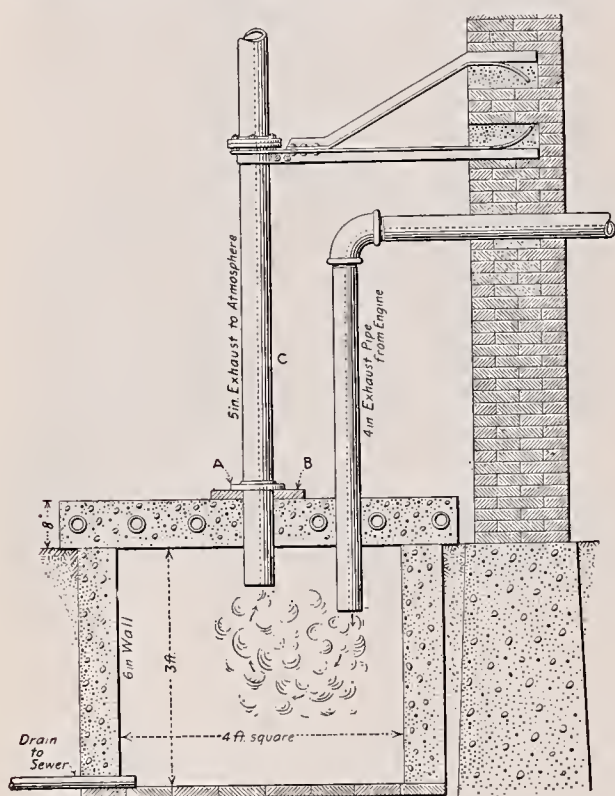
They do better cultivation and they are reaping better results.

The corn boys are not the only ones who have done such good work. There are five hundred boys, belonging to this united agricultural band, who are poultry breeders. Then there are those boys who grow potatoes. Through their efforts

seed potatoes of other varieties have been brought into the region; proper fertilizers used and proper methods, so that the acreage has this year been increased at least 20 per cent, and instead of 657,214 bushels being grown on 10,675 acres of land in Berks County alone, a million and a half bushels were grown on about 12,800 acres. The boys also find delight in trying to grow the biggest pumpkins, the largest turnips, the longest radishes, the finest celery and many garden products.

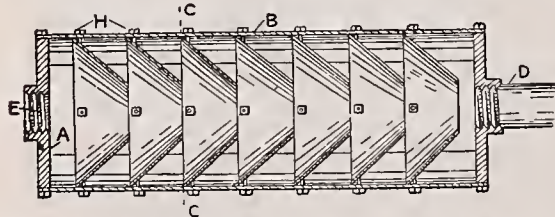
MUFFLERS FOR GAS ENGINES

One of the accessories of a gas engine which may be easily supplied by any engineer is a muffler, and in view of the fact that most mufflers are home-made, the different types vary widely. It must be remembered, however, in making a gas engine



A CONCRETE MUFFLING BOX.

muffler that besides giving good results in the primary purpose of lessening or eliminating the noise it must be designed so that it will not materially affect the power of the engine. A good concrete muffler in the shape of a muffling pit is described by a contributor to *Power*. The pit is just outside of the engine-room wall and is 3 feet deep and 4 feet square. The walls are of concrete, 6 inches thick, and the cover is 8 inches thick and reinforced with old boiler tubes to stiffen it up. The pipe carrying the exhaust gases away from the pit is 5 inches nominal diameter; a 1-inch



MUFFLER SUITABLE FOR SMALL GAS ENGINES.

collar is shrunk on the pipe at A and this rests on a 15-inch plate B. The pipe C is braced to the building wall, as shown. When pouring the cover short pieces of pipe were put in place of the intake and outlet pipes and left there until the cement had dried.

This, it is said, has muffled the exhaust so that the report is not as loud as that of a non-condensing steam engine exhausting to the atmosphere; in fact, it can hardly be heard when standing near the pipe.

Of course such a muffling pit is designed for a rather large gas engine, the one illustrated having been used with an engine of 125-horsepower, but it may also be employed for smaller engines or by enlarging the dimensions several gas engines may exhaust into the same pit.

A muffler for a small size gas engine, similar to

those in use in the average country elevator, may be easily made by a method described in the *Automobile Dealer and Repairer*. This muffler is made from a number of funnels and a piece of 6-inch stove-pipe. Funnels are procured that are the right size at the large end and each are cut off in the form of a truncated cone, the small end being about the size of the opening in the exhaust pipe. Slip these cut-off funnels into the stovepipe B, and fasten the bell ends with small stove bolts in about four places around the pipe.

In placing the funnels, they should be in such shape that the small end of any one comes in exact line with the opening of the next one, as shown by the dotted line C. Place the funnels in this manner until the entire length of pipe is taken up. The ends are made of floor plates threaded to receive the exhaust pipe from the engine. Turn the flange to fit into the end of the pipe as shown at A. Tap this to receive a number of machine screws to hold it in place.

In the exhaust end place the same kind of a plate and screw a short nipple into the threads. The funnels should be placed so that the holes at the small ends will be in direct line. This gives a straight line for the exhaust gases to escape and still deaden the noise satisfactorily without the danger of the muffler becoming stopped up as sometimes happens with other kinds of silencers.

times happens with other kinds of silencers. It is asserted that this funnel type of muffler has been installed with success in a number of plants.

FARMERS URGED TO PROTECT CORN

The attention of farmers is called to the necessity of properly protecting their corn after it has been cribbed in a statement recently issued by Secretary George A. Wells, of the Western Grain Dealers' Association. This statement, which is of interest to producers everywhere, is as follows:

The agricultural colleges, extension departments and crop improvement organizations have been for several years vigorously boosting for increased yields and improved quality of corn by improving and testing the seed, but practically nothing has been said or done to promote the idea of properly caring for the corn after it is harvested.

The farmers this year have grown the largest crop of corn on record that has matured fairly well so that the inherent moisture content is about normal, but many farmers are piling the ear corn that is of good quality on the ground, and storing it in open wire cribs exposed to the weather without any protection whatever from the snow and rain.

The corn thus exposed is most certain to deteriorate in quality and become damaged to such an extent that it will be unsound and consequently have to be marketed as no-grade, when the same corn, if stored in well ventilated cribs, would have cured out, reducing the moisture content and preserving the quality otherwise in such a manner that it would be marketed as No. 3, or better, grade.

The discount on no-grade corn will probably be as much as 10 cents per bushel, especially if the market becomes congested and in this connection would suggest also the probability that such damaged corn will some time in the future be considered under the pure food and drugs act as unfit for animal food, and its sale prohibited, as is now done in the state of South Carolina, where the corn is subjected to the acidity test, and if not within the requirements is confiscated under the law of the state.

Grain Exporters Organize

Representatives of Leading American Grain Exchanges Perfect Plans for Association of Exporters—Tentative Plans and Objects of the New Body

At a meeting of representatives of the principal grain exchanges in the United States and Canada, held at the New York Produce Exchange on December 26, plans were practically completed for the organization of the North American Export Grain Association, which is to include in its membership the leading exporters in the two countries and is expected to remedy long standing abuses with which American grain exporters have had to contend.

A sub-committee on organization, composed of S. F. Engs, chairman; O. M. Mitchell and George W. Blanchard, appointed at a previous meeting, presented its report, which was accepted and the committee discharged. The objects of the association are given in the committee's report, which is as follows: "The following commercial bodies, through the undersigned, their duly appointed delegates, join with each other, subject to approval of the bodies which they represent, in the formation of an association to be known as the 'North American Export Grain Association.'

"The association will represent and protect the North American grain export interests as the same may be affected by the form of foreign contracts and export documents.

"The government of the association shall be vested in a council of delegates, one from each commercial body, elected or chosen annually, according to the method prevailing on such exchange.

"An alternate shall be named whenever delegate is prevented from serving.

"The delegates now in attendance will form the first council and proceed at once to its proper organization.

"They will hold office until December 31, 1913, or until appointment of their successors.

"We agree so far as lies in our power, that the grain export members of the commercial bodies we represent will be bound by the rules and regulations which may be unanimously adopted by the association through its council of delegates."

The members of the association and their delegates are as follows:

New York Produce Exchange, S. F. Engs; Montreal Corn Exchange, A. George Burton; Winnipeg Grain Exchange, E. S. Jaques; Commercial Exchange of Philadelphia, F. E. Marshall; Duluth Board of Trade, William Beatty; Baltimore Chamber of Commerce, George Jackson; Boston Chamber of Commerce, George W. Eddis; Kansas City Board of Trade, H. F. Hall; Chicago Board of Trade, James Norris; Toronto Board of Trade, John Melady.

It is expected that the new organization will stand in the same relation to exporters on this side of the Atlantic as do the London Corn Trade Association, the Liverpool Corn Trade Association and the Bristol Channel Corn Trade Association to grain importers of England. Indeed, it may be asserted that the North American Export Grain Association is being formed primarily to secure reforms in the export grain trade which these powerful British organizations have refused to grant at the behest of individual exporters. Particular effort will be made to change the form of contract under which grain shipments are now made and which is claimed to be twenty years behind the times, having originally been framed to suit conditions of the old sailing ships. One condition of this contract provides for payment on 60 days' sight, whereas grain now arrives in a very much shorter time. Attempts to have the rule changed have been unsuccessful, although Continental buyers, who originally enjoyed a 90-day clause in their contracts, now do business on a sight draft basis.

Another instance where the foreign buyers abused their power was in the case of the London dock strike. The various associations gave notice to American shippers that contracts would have to contain a strike clause, thus putting the burden of their own local conditions on shippers over here,

Surviving After Winter Wheat

How an Ingenious Salesman Helped a Discouraged Grain Shipper Out of His Difficulties

By GUIDO D. JANES

All the winter wheat in the Crab Orchard section had been slaughtered by the severe winter, and 1912 Prosperity was all to the bad around said section. All of which made Grain Shipper Bill Moisture feel blue and morose.

Day after day he saw winter and spring wheat from other sections saunter by in car lots bound for Chicago carrying prosperity to both parties of the bill of lading. Each grain car poked fun at him and made ironical remarks with their rattle and noise. Even the engineer cast aspersions at the unfortunate grain merchant by guying him with the locomotive whistle.

But one day while Moisture was in his office filling up the empty bins and garnerers and sacking room with his sorrow, Traveling Salesman Charlie Hookmcow dropped in.

"Morning," he began, smiling. "I represent the Blank Dust Collection System of Detroit. Let me sell you a dust collector and reduce your fire risk."

Moisture threw a wet blanket on Hookmcow by not even attempting to reply. Instead he only scowled and shook his fist. But seeing this did not have any effect, the grain man told him in as few words as possible to shake the dust off his feet from this locality with the dust collector and pull out at once.

Charlie was not at all discouraged at this winter-wheat-killing-cold reception. Instead he gazed out of the office window to get more inspiration, and to wait while a noisy, rickety freight train hobbled by. As he did so his eye caught sight of car No. 21315 B. & B. R. R. leaking grain at a terrible rate along the right of way. This gave him a tip. He turned and slapped Moisture on the back. Moisture arose from his chair with blood in both eyes and set about to turn himself into a pugilist by rolling up his shirt sleeves.

"Stay," said Hookmcow. "Sheath your sword. Lay down your arms. I have something up my sleeve. Don't bother with yours."

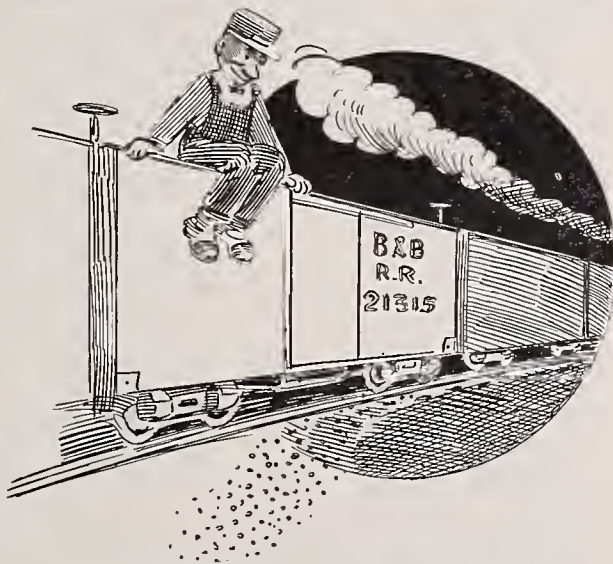
Moisture calmed down and seated himself again.

"It's this," added the salesman. "Install my dust

lector. In due time the collector came, and Hookmcow was on the job to see that it was installed correctly. On Tuesday evening the work was completed.

About nine o'clock the through freight came along, and in its usual manner guyed Moisture by whistle and noise. At midnight another train ditedoed the nine o'clock one and before morning six others had followed suit. Each of the trains had from four to ten loaded wheat cars.

Early, however, on the following morning Mois-



"LEAKING GRAIN AT A TERRIBLE RATE."

ture got up, donned his overalls, and put the stopper in his ink. He did not even inspect the morning's mail with its five duplicate copies of the same market report. Instead he sauntered outside of his place of business and in company with Hookmcow collected the overnight leaked grain from the above mentioned trains off the right of way. By noon there were 20 bushels of wheat in the garner and by night the elevator boot had passed up 19 bushels of the stuff.

That was only a starter, though, for at the end of the week the very train crew that had been poking fun at Moisture had to sojourn at Crab Orchard and pick up four cars of grain. Moisture's name was on the bill of lading.

"Well," ejaculated the freight conductor upon observing the bill of lading, "Moisture has been up to some crooked work. I bet he stole this grain. I'll put our detectives next."

"No, you won't," put in Hookmcow, who had caught the way car so that he could make the next town that night. "This grain of Moisture's is legitimate property. The joke is on you."

"How so?"

"This way." And Hookmcow told the trainman the whole plan from beginning to end.

"Well," said the conductor, after hearing the story and catching his breath. "That is the best scheme I have ever heard of. If you are sharp enough to do that, you are sharp enough to ride on this train to the next station. The rules forbid you, but stay on. This is my humble way of apologizing to Moisture."

CORN SHOWS INCREASING IN NUMBER AND IMPORTANCE

Not only in those states where corn is conceded to be the leading crop, but all over the country, corn growing contests and corn shows are becoming quite a recognized factor in stimulating public interest with reference to the development of corn. The number and size of the various shows held during the present crop season were greater than ever before. All of these corn shows may be divided into four general classes. There are the contests conducted by grain and implement dealers, which are

interesting but not of paramount importance because they are confined chiefly to that particular locality where the dealer is located. There are the various state corn shows, and the contests conducted by boys' corn clubs throughout the country and there is the National Corn Exposition.

The state shows, which have been held principally in December and the first two weeks of the present month, were very largely attended and great interest was manifested. Every attempt was made to insure the shows being strictly educational in character and in the majority of instances no admission fee was charged. Some of the prizes were in cash and others consisted of high class farm equipment ranging from modern silos down to agricultural implements. The results obtained more than justified all the expense involved.

For instance in Texas where more than four thousand people entered in the corn growing contest instituted by the Texas Industrial Congress, it is estimated that for these four thousand the average yield of corn was 51 bushels to the acre. The average yield of corn for Texas during a ten-year period is something less than 20 bushels. Assuming that these four thousand would have, without the incentive of the prizes, exceeded the average, and made 25 bushels to the acre, there is 26 bushels to be credited to every one of these four thousand as a consequence of this contest, or, in the aggregate there is 104,000 bushels of corn which would not have been added to the state's wealth had not this contest been instituted. Estimated at the price of 50 cents a bushel it is considered that \$52,000 was added to the wealth of Texas in one season from the expenditure of \$10,000 in prizes, counting the results in corn alone.

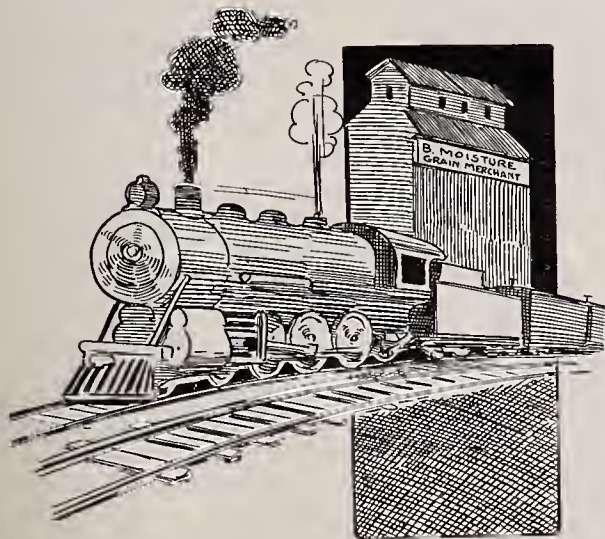
Tennessee, one of the commonwealths which does not have a state-wide corn show, has been so impressed with the results of small district contests that an annual state show is being planned, to begin with next December. C. C. Gilbert, assistant secretary of the Nashville Board of Trade, recently elected to the state legislature, announces that he will introduce a bill at the next session of the latter body carrying with it an appropriation of \$10,000 to be used for cash prizes in connection with this state corn show. It has been pointed out that in 1911 the average yield per acre in Tennessee was 33 bushels, and in 1912 the average yield amounted to 35½ bushels per acre. It is proposed to make extra efforts to bring the average up to 40 bushels per acre during the present year.

It is worthy of note that in many of the biggest contests, boys have carried off the principal honors. Harper J. Brush of Lisbon, North Dakota, produced the highest yield in that state. Here there were 513 farmers entered, yet this 12-year-old boy won first prize with a yield of 76.7 bushels gross and 71.7 bushels mature corn to the acre. In South Carolina E. M. Joye, a boy corn grower, produced 207 bushels of corn on one acre, which is the largest yield made in that state since Jerry Moore broke the world's record by producing 228 bushels and three pecks on one acre in 1910.

The establishment of boys' corn clubs in all sections of the United States has contributed largely to the success of these young producers. These clubs educate, foster and develop corn growing, and introduce the necessary element of interest by holding competitions from time to time. The splendid influence of the boys' corn clubs upon the corn crops of the future can readily be appreciated.

One unique feature inaugurated this year was taking the winners of the boys' corn growing contest in Ohio on a long railroad trip. On December 15 three hundred farmer boys left Columbus, Ohio, in a special train for Washington, D. C. Nearly a hundred of these, however, paid their own expenses out of the proceeds of the sale of corn raised for the contest. The remainder were taken free under arrangements by the state board of agriculture. The money for the trip was furnished by bankers, grain dealers, business men, and farmers' organizations. Over one thousand boys, altogether, took part in the contest.

The National Corn Exposition of course takes



"GUYING HIM WITH LOCOMOTIVE WHISTLE."

collecting system, extend same via long flexible spouts and rubber hose up and down the tracks and vacuum-clean the right-of-way and incidentally pick up the grain which has leaked out. This grain will fill your elevator, bringing you prosperity, and will give me an order."

Moisture almost fainted, but, recovering, began to paint his face with smiles and to place joy tears in his eyes.

"Wire your house," he remarked, "to send a dust collector for 60,000 bushel elevator. We will get busy on the scheme and by next Christmas I can say Merry Christmas with the accent on the merry."

"Sure."

So the Detroit house was wired for the dust col-

precedence over all other shows, as is natural, and many contestants in state and local shows enter their exhibits in this big show. The exposition will be held this year in Columbia, S. C., January 27 to February 8. Particular interest is attached to the coming show because this is the first time it has been held in the South. Southern producers are therefore putting forth their utmost efforts to make this one of the most successful corn exhibitions ever held.

THE GRAIN CONFERENCE AT CHICAGO

On December 16 there was held at the LaSalle Hotel, Chicago, three grain trade conferences. The first was a meeting in executive session of the directors of the Grain Dealers' National Association; the second, a meeting of the legislative committee of the Grain Dealers' National Association, and the third, a joint meeting of this committee with officers of affiliated associations with the National body, and the president and secretary of the Council of Grain Exchanges.

The following were in attendance:

Directors of Grain Dealers' National Association—H. I. Baldwin, Decatur, Ill.; President Chas. D. Jones, Nashville, Tenn.; J. H. Cofer, Norfolk, Va.; B. A. Lockwood, Des Moines, Iowa; L. W. Forbell, New York City; J. W. McCord, Columbus, Ohio; T. A. Morrison, Kokomo, Ind.; J. J. Stream, Chicago, Ill.; Vice-President, E. P. Peck, Omaha, Neb.

Members of Legislative Committee—A. E. Reynolds, Crawfordsville, Ind.; J. L. McCaull, Minneapolis, Minn.; H. D. Grimes, Portsmouth, Ohio; William T. Cornelison, Minneapolis, Minn.; Geo. A. Wells, Des Moines, Iowa.

Officers of affiliated state associations—C. M. Ashpugh, Frankfort, Ind., president, and Chas. B. Riley, Indianapolis, secretary of the Indiana Grain Dealers' Association; Lee G. Metcalf, Illiopolis, president, and S. W. Strong, Urbana, Ill., secretary, Illinois Grain Dealers' Association; Geo. A. Wells, Des Moines, Iowa, secretary, Western Grain Dealers' Association; E. C. Eikenberry, Camden, president, and J. W. McCord, Columbus, secretary, Ohio Grain Dealers' Association.

Council of Grain Exchanges—J. C. F. Merrill, president and J. Ralph Pickell, secretary.

The members of the legislative committee discussed the conditions surrounding the grain trade with respect to future legislation against future trading. On this subject J. C. F. Merrill spoke as follows:

NO ANTI-FUTURE LEGISLATION DURING 1913.

The Council of Grain Exchanges will at all times join hands most heartily with the National Association in all efforts to better conditions of the grain producing and grain handling public. Any feeling that there might be friction between these organizations respecting priority of right to lead the movement against inimical legislation should be dispelled. No such feeling now exists, and the good sense of the officers of both associations may be confidently relied upon to prevent such feeling gaining headway at any time. Improvement of conditions affecting the grain growers and handlers, not self-glory for these associations, should be their mutual actuating motive.

Regarding impending legislation, it may be said that the Sixty-second Congress is drawing to a close. On March 4th it ends and all bills introduced during the session, of which there are thousands, automatically die. Therefore, when the Sixty-third Congress convenes, whether in special session in April, or regularly on December 1st, 1913, new measures will be the only ones possible to consider. All bills introduced under the rules must be referred to the proper committees which will be made up in part of new members; then committees must give proper consideration to them, and to do this must in all fairness give hearings to those who wish to appear before the committee and give testimony and make representations for or against any bills under consideration. This will afford the grain interests another opportunity to be heard. Of necessity, this takes time and if we judge future action by that of past Congresses, it will be after the holidays, after the opening of the first regular session of the new Congress, before the grain futures bills will again be actively dealt with. Therefore, it is impossible to intelligently proceed in opposing measures now. The unexpected in the affairs of life is the one element always to be remembered as the chief cause of disaster, and it becomes a duty to guard against it, so far as we reasonably may, but it can not be wholly eliminated.

In the present case, indications strongly are that for the remaining few weeks of the Sixty-second Congress, appropriation measures and other important work will entirely occupy all of the remain-

ing time, and it will be found to be too short. In the meantime, that is, during the coming fifteen months, a campaign of education should be carried on with vigor. The needful services of the Exchanges in distributing the product of the six million farms of the United States to the ninety-five millions of people, the food necessities of the nation, should be made plain. That without the great central markets grain would be concentrated into narrow lines of commerce controlled by relatively few men. This is true at present time of nearly all products not traded in on the Exchanges.

Speculation is the stairway of advance from low to high, as well as from high to low, one step at a time, of the prices of fluctuating commodities. The distinction between speculation as founded on calculation, and gambling as based on chance should be made clear. That the ownership of articles produced, of necessity continues from time of production to time of need, and that the owner either speculates on the outcome, or through hedge trading transfers such risk to another, just as he transfers the risk of fire loss to an insurance company—that it is as logical and is as ethically right to do one as to do the other. Therefore, the speculator is a necessity, in a measure as needful as the insurance company. Credit in business is secured by the elimination of risk. Without such elimination chaotic conditions would prevail. Speculation is abused, just as other useful agencies are. A hardware merchant sells over his counter a razor or a revolver for legitimate use; one is used to cut a throat, the other to self-destroy the buyer. The dealer is not responsible. The perversion of the use by the buyer of the article sold in good faith constitutes the wrong. So it is in many of the departments of human life and experience.

The perversion of the use of speculation from being a function of investment trading based on



THE POWERS ELEVATOR AT GENOA, OHIO.

calculation, to that of gambling based on simple chance, is the fault of the individual, for the Exchange member who executes the order may not if he would, read the mind and so learn the intent of the individual.

Just at this point the distinction between speculation and gambling is possible, and is commonly not recognized, and the Exchanges are blamed for that which the non-member is only blamable for. It may be confidently asserted that the proportion of the undesirable found clinging to Exchange business is not greater than is found in all general business.

The truth should be promulgated, and when it is known most of the criticism of and enmity to the Exchanges will disappear. Therefore, the National Association should spread the gospel of truth and so assist the Council of Grain Exchanges in rendering the public a genuine service—that of education of the people. Intelligent influence at Washington need not be feared. Therefore, let the light be shed abroad and let every man in the grain business, producer and handler, inform himself and then do his part.

The principal developments of the meeting were that all the grain men present representing nearly all sections of the country were agreed upon the policy of protecting the grain interests against hostile legislation which should mean loss to the grain grower, the grain handler and the consumer. Other conferences will be held throughout the year.

Canadian grain now in storage at eastern and terminal elevators, and in the holds of ships tied up for the winter at Port Arthur and Fort William, has reached a record total. In the elevators there are 19,544,997 bushels, compared with 17,345,821 bushels a year ago. There is in the holds of ten Canadian and fourteen United States vessels at Fort William and Port Arthur, 12,650,000 bushels, making a total of 32,194,987 bushels.

A MODERN ELEVATOR AT GENOA, OHIO

Two elevators are owned and operated by the Powers Elevator Company, both in the state of Ohio, one at Genoa, and the other at Martin. The Genoa elevator is shown in the accompanying illustration. It has an excellent location, being just about fifteen miles southeast of Toledo, and is well equipped to take care of a heavy quantity of grain. There are fourteen bins, having a capacity of 2,000 bushels each, and six cribs with room for 700 bushels each, thus giving a total capacity of 32,200 bushels.

Three elevator legs are used, two in the grain part of the elevator and one in the seed room. The equipment includes a Standard Seed Cleaner, a Monitor Cleaner, an oat clipper and a Hess Grain Drier. The latter was installed last fall. There is also a special dump for corn. The entire elevator is run by a 25-horsepower Columbus Gasoline Engine.

The Powers Elevator Company has been established for more than twenty-five years, and in that time has built up the business of its two elevators to very great proportions. The officers of the company are S. T. Wood, president, and E. A. Powers, secretary and treasurer. All kinds of grain and seeds are handled in addition to hay and straw, and

a side line of lumber, coal and building material is carried. The shipping facilities are excellent, for shipments may be made over both the L. S. & M. S. Ry. and also the electric line of the Northwestern Ohio Railway & Power Company.

RESOLUTIONS ON DEATH OF J. D. FRAZIER

The following resolutions have been adopted by the National Hay Association on the recent death of J. D. Frazier, one of the oldest as well as best known members of this body:

"Inasmuch as it has pleased the Almighty to call from his labors our friend and fellow member, Mr. J. D. Frazier, therefore, be it

"Resolved, That it is with profound sorrow that we learn of the death of Brother Frazier, valued member of the National Hay Association, and that the officers, with those members who knew him, deeply sympathize with his bereaved family in the irreparable loss which they have sustained. Mr. Frazier by his long association with the members of the grain and hay trade had by his kind and estimable disposition endeared himself to the many with whom he had business relations, and we have rarely lost from our membership one who was more deeply to be mourned; and, be it further

"Resolved, That our association extends to the widow and family its sympathy in this, their bereavement; and, be it further

"Resolved, That a copy of these resolutions be spread upon the minutes of our Association.

"H. G. Morgan, Chairman, R. E. Karnes, C. D. Carlisle—MEMORIAL COMMITTEE."

A WEIGHING DEPARTMENT DINNER

One of the pleasures of the holiday season at Chicago is the annual dinner given by H. A. Foss, weighmaster of the Chicago Board of Trade, to the Board of Trade Weighing Department. Not only is it regarded as an event of importance by the weighmen themselves, but by the weighing committee of the Board, and the guests whom Mr. Foss elects to honor with an invitation to temporarily become a member of this large family of men, who for a night at least, are in full control of the department, of Weighmaster Foss himself, and led by Deputies Metcalf and Saunders speak out in meeting as the spirit dictates.

The annual dinner was given this year at the Hotel Sherman, and seats were taken at the tables at 7:30 o'clock. Flowers exhaled their perfumes, music by the weighing department orchestra led by Deputy John Link arose in a harmony of tonal sounds, and poets, for it was a night of poetry, riotously competed with each other in syncopated rhapsodies.

Incidentally Weighmaster Foss found chance to say very little and he generally has quite a little to say. The only time during the evening when he appeared notably in the spotlight was when Judge Fred L. Fake, in a presentation speech for the boys gave the weighmaster a hand-painted, hand carved toy automobile presumably to be used in conveying its owner about the golf links.

The one touch of nature which makes the world akin came when A. E. Schuyler was presented with a really handsome gold watch by Deputy Weighman Jeffries on behalf of the boys of the department. Mr. Schuyler thought the matter only a joke until he removed the watch from its case when his surprise was so great that his very appropriate and feeling speech of thanks and acceptance had to be put off until later in the evening.

The program of the evening was as follows: At nine o'clock Mr. Foss welcomed the guests of the weighing department. Deputy Walter E. Felt gave a brilliant word picture of the country grain dealer and his services to the community and grain trade generally.

Deputy Geo. W. Metcalf read a poem supposedly from the pen of Weighmaster Foss on "The Mystery of a Heavy Shrinkage or What Happened to a Car of Wheat." A. E. Schuyler read a humorous poem on the subject of "Bill Saunder's Ole Pylorus." Robt. Hunter followed with some verses recounting achievements of Weighmaster Foss.

A number of readings were given by Professor Patterson of the Columbia School of Expression of Chicago. Rev. T. A. Mcon followed in vocal numbers.

Harry A. Wheeler, president of the Chamber of Commerce of the United States made an address on "Misrepresentations" in which he urged holding steadfastly to high business ideals and deplored the tendency of attacking institutions and methods which were known to be for the best interests of the whole country.

Deputy Geo. W. Metcalf closed the evening in an address on the tallyman in which he weighed in humorous vein the various advantages in the use of the titles deputy or tallymen as given to the men of the department.

The following members of the weighing committee of the Board of Trade, and guests were present:

S. W. Strong, Urbana, Ill.; Lee G. Metcalf, Illiopolis, Ill.; Geo. B. Montelius, Piper City, Ill.; E. A. Jarvis, Edw. Andrew, Geo. E. Marcey, H. N. Sager, Chas. S. Clark, J. Carver Strong, John E. Bacon, E. G. Osman, Chicago, Ill.; H. A. Hillmer, B. P. Hill, Freeport, Ill.; C. H. Canby, Frank B. Rice, J. Ralph Pickell, Judge Fred L. Fake, Robt. L. Burnap, R. H. Donnelly, Chester Arthur Legg, A. E. Schuyler, E. F. Leland, Aaron Cline, Leslie F. Gates, David Lasier, J. C. F. Merrill, A. O. Mason, Chicago, Ill.; Harry A. Wheeler, Chicago, Ill.; J. N. O'Day, L. J. Pierson, J. C. Wood, Chicago.

We present herewith, in closing, the speech of Deputy Walter E. Felt on the subject "The Country Grain Dealer."

The vision which I shall endeavor to picture for you tonight is taken from a scene in a peaceful lit-



H. A. FOSS, WEIGHMASTER OF THE CHICAGO BOARD OF TRADE.

tle village, not so far away, where stands a small grain handling warehouse, such as is commonly known to the grain trade as a "country" or "interior" elevator. It is to this little country elevator, with its towering cupola overlooking the richest and most beautiful garden spot in all this God-given land, that the farmer brings his golden harvest of yellow corn for which our beloved state is so renowned.

The operator of this little country grain warehouse is a most important personage, for he it is who enables the honest tiller of the soil to exchange his bounteous crops for Uncle Sam's idolized and much-sought-after gold and at a minimum of expense and a maximum of returns. This country grain buyer, who starts the life-giving grain rolling towards the great market centers of the world, where it is made up into flour and meal, and other manufactured products, to feed the hungry hordes, is also a banker, for he advances money on the growing crops; he is also the distributor of the coal that warms the farmers' homes in our timber denuded plains; he also distributes the bounty of our forests, for he causes to be brought into the community in which he lives those essentials necessary to erect the one institution of which we of the United States are most proud, the American home; he is the disseminator of commercial and economic information, for he keeps in close touch by telephone and by telegraph, with the growing crop conditions throughout the land, and with the volume of grain and produce moving to and from our large distributing centers, and with the prevailing prices of products as recorded on the great market exchanges with which our country is blessed. In a word, this country grain dealer, of whom I speak, is performing an indispensable service under our existing commercial and industrial system. In addi-

tion to all these multitudinous duties to which I have referred, such as buying grain, financing the producer and distributing the coal and building material which all must have, this busy individual is also engaged in operating his elevator, which means, that to be successful, he must be an expert grain inspector for, like all up-to-date interior grain dealers, he buys his grain according to grade and moisture test; he must be an expert weigher for, like all up-to-date grain dealers, he maintains a high grade weighing machine; he must be an expert scale man for, like all up-to-date grain dealers, he has supplied himself with test weights with which to determine the accuracy of his scale; he must be an engineer and an expert mechanic, for he runs his own engine and oils and repairs his own elevator machinery; he must be an expert all-around grain elevator man, for he personally runs his elevator, acting as his own weighman, spout shifter and car loader, and last but by no means least, he must be an expert car cooperer, and that is saying a great deal, provided, of course, he attempts to follow the pages and pages of instruction on "how to prevent leakage" compiled and published by our progressive weighmaster, Mr. Foss, and his ex-assistant, Mr. A. E. Schuyler.

You can plainly see by the homely picture I have drawn that the value of the services of the interior or country grain shipper is incalculable. His activities not only benefit the immediate community in which he lives, but the whole world as well. This man, so remote from our busy mart, like thousands of other shippers, finds it inexpedient to accompany each individual shipment to market, hence he must delegate others to represent him in the actual marketing of his grain. Here is where the great grain exchanges of our land come to his assistance by furnishing every modern facility to safeguard his interests. It was with this realization of its duties, that caused our own progressive exchange, of which we are so justly proud, to create at various times several different departments, of which the weighing bureau plays a most important part in preventing and eliminating unjust practices injurious to the welfare of our country shipper friend, the man for whom in reality the members of the weighing department are employed.

Time will not permit me to follow the pilgrimage of the grain from the productive harvest fields of our glorious land to the bursting granaries of the city far. But I will transgress on your time long enough to recite a little poem that recently came to my attention which tells in pleasing rhyme the story of the journey. It is entitled "The Nation's Commissariat."

The farmer scattered his generous seed
In the brown, bare, waiting soil:
My harvest, he said, shall the hungry feed,
And gladden the world in its daily need,
And strengthen the sinews of toil.

Soft sunshine, sweet dews and musical rains
Their loving alchemy wrought,
Till the ripened grains from the bounteous plains
Heaped, over and over, the loaded wains,
To the bursting granaries brought.

Where mountains their silver coffers hide
And fasten the vaults with gold;
Where full-bosomed rivers, on swelling tide,
The giant trunks of the cedars guide
To the sharp saw's hungry hold;—

There are toilers, O farmer, in mine and in mill,
In the cities' bustle and glare—
Millions to feed upon valley and hill—
There is stern need, then, of the fruits of thy skill,
Far away from thy grain-lands fair.

The soft snows melt on the mountain hoar,
And the rain-drops pattering fall;
Through thousands of trickling rills they pour,
And the city reservoir hoards the store,
And sends it out freely to all.

So we garner the riches of hill and of plain,
Where the waving harvests grow;
So we give their wealth to the world again,
As the wings of steam bear the golden grain
Where the swift trade-currents go.

LIVERPOOL AS A GRAIN PORT

Easily the leading foreign port receiving American grain is Liverpool, and every year immense quantities of grain pass through or are stored in the city. It can be seen, therefore, that big storage facilities are necessary, and the available warehouses and grain handling plants of Liverpool are such as to insure its importance as a grain port. All these storage facilities have been of gradual development, according to *Milling*, for it appears that in 1750 there were hardly any warehouses worth mentioning in Liverpool, and none in which either grain or flour could be handled. In 1762 an act of Parliament was passed for the construction of St. George's Dock, and at the same time the necessity was felt for building a big warehouse to handle and store the large quantities of merchandise that came to the dock. Nothing was done, however, until 1793, when the old Goree warehouses were erected. These were seventeen in number and many of them were thirteen stories high, so that they were worthy of

their city. But in 1802, they came to an untimely end, for a fire broke out in one of them, and the whole of the warehouses were burned to the ground. The damage was valued at over \$1,500,000.

About this time the canals of England began to be of importance and the development of the Chester and Ellesmere Canal led to the extension of Liverpool's trade. In 1812, the Duke's Warehouse, the first of the public grain warehouses that now exist, was built. From that time for the next fifty years, the grain that came to the port was stored with other merchandise in private warehouses which existed in James street and Moor street.

It is estimated that the total capacity of the port, including public and private warehouses, is 525,000 tons, of 19,000,000 bushels. Of this bin space, nearly one-third belongs to the Liverpool Grain Storage Company. This company, which has been in existence now for over a quarter of a century, can store nearly 145,000 tons of grain in its two Alexandra and Coburg warehouses. It was formed at the time when foreign wheat first began to be the staple raw material for English millers, and thus the company was able to take advantage of the increasing use of imported wheats.

Next to the Liverpool Grain Storage Company, the Mersey Docks and Harbour Board are the largest owners of grain storage facilities in the city. Their practice, however, differs from that of the Grain Storage Company in that they store only a very small portion of the grain in bins; by far the larger part is disposed in bulk upon the broad floors of the various warehouses. The grain storage properties belonging to the Dock Board comprise two big warehouses and several smaller ones. Of these the two large ones are the Waterloo grain warehouse on the Liverpool side of the Mersey, and its Birkenhead grain warehouse on the Cheshire bank. It may be noted that neither of these two big granaries was built for the Dock Board, but were erected for a private company, which proposed to carry on a business similar to that so successfully inaugurated some eighteen years afterwards by the Grain Storage Company. The enterprise, however, was not commercially successful, and about two years after they had been built the warehouses passed into the hands of the Dock Board. The total capacity of their warehouses is about 73,000 tons.

Third in order of size among public grain warehouses, but first in regard to age are the Duke's Warehouses. In matter of interest these will bear comparison with either of their larger competitors. They are more than a hundred years old for the present warehouses trace their origin back to 1812, when the trustees of the Duke of Bridgwater erected a warehouse on the site of the present buildings. At first this warehouse was used for general purposes, and then partly for grain, while after a few years the warehouses were used exclusively for the storage of grain.

Grain was first stored there about the year 1820. After that time these warehouses increased in importance and soon had accommodation for large quantities of grain. It is worthy of notice that as the Duke's warehouses were the pioneers of public grain warehouses in Liverpool, so were they the first to use modern methods in handling grain. Thus about the year 1860 a number of silo bins were built to hold the grain, while at the same time a telescopic elevator was installed for dealing with the grain in the barges in bulk. This was the first of its kind in England, and was in continual use until 1897. In that year all of the machinery, silos and warehouses were overhauled and new machinery installed. At that time also the aerial transportation from the warehouses to the vessels in the docks for delivery, was abolished, owing to the improvements in the dock construction. In 1900 the ownership of the Duke's warehouses underwent a change. Previously the warehouses had been a branch of the business of Ross T. Smyth and Co., but at that time a separate company was formed under the title of Duke's Warehousing Company, Ltd. At the present time the company has space for 10,000 tons of grain, which is stored partly in floors and partly in bins.

Probably the largest private storage warehouses

in Liverpool are those owned by the North Shore Flour Mills, Ltd. There is room here for the storage of about 25,000 tons of grain. Of this, 10,000 tons can be stored in silo bins and 15,000 tons in various warehouses belonging to the company. The large private silos owned by Buchanan's Flour Mills, Ltd., have a total capacity of nearly 16,000 tons. The storage warehouse of Edward Hutchinson will hold 15,000 tons. W. A. Vernon and Sons have capacity in their silo bins for 9,000 tons, and there are a great number of private warehouses holding 5,000 tons or less.

In view of the fact that Liverpool's grain facilities have grown at such a rapid rate, it seems likely to develop to enormous proportions within the next few years, and if the English government decides, as it is continually urged, to build granaries, in which a reserve of grain will be kept, in order to reduce the risk of national starvation in the event of war, it is certain that Liverpool will be one of the places where the granaries will be erected.

A FREAK VARIETY OF CORN

In these days whenever new kinds of plants and vegetable and fruit products are being constantly introduced by Luther Burbank and other wizards of horticulture, it is not surprising that new varieties of grain are also making their appearance. The latest is a new kind of corn, which it is claimed if properly developed will displace entirely our Indian corn or maize. It is still in the experimental stage



ELEVATOR OF E. T. HOLLOWAY & SON, WING, ILL.

however, and we have as evidence only the reports emanating from the agricultural experiment station in Illinois. It seems that about three years ago, an eccentric or "spot" ear was found growing among the ordinary Indian corn at the experiment station, and this odd looking ear was laid aside at the time as a mere freak of nature. It was found, however, that its peculiar features possessed some superior qualities over those of the normal ear of corn and its systematic cultivation was undertaken with decidedly pleasing results.

The shape and entire structure of the new corn are radically different from all varieties of corn previously known. In form it resembles the pyramid or familiar cone of the pine tree, and in structure it is like a wide-mouthed funnel or an inverted goblet. The grains grow on the inside of the cone, as well as cover the outer surface. They are not attached to a solid cob as is the case with common corn, for there is no cob or semblance of a cob. This is in point of fact the unique distinction of the new ear. The kernels grow upon stems, precisely as do grapes, and the new ear looks like a bunch of grains of Indian corn. When examined, the bunch is found to be hollow within.

The ears of such corn, it is said, can be fed to stock just as they are. They do not need to be shelled. The slight network of fiber that forms the stems of the kernels may be eaten by stock, just as the grains are. The whole ear is eaten. It is believed that the new variety also will prove of special value for ensilage. It is very singular, also, that the tassel of the new corn takes on the same cone-shaped figure and appearance as the ear itself,

A WELL EQUIPPED ILLINOIS ELEVATOR

Although the firm of E. T. Holloway & Son has been in the grain business at Wing, Ill., for more than twenty years, their elevator, which is shown in the accompanying illustration, is of comparatively recent date, having been erected in 1905. In the construction of the elevator, E. T. Holloway & Son applied the knowledge and experience they had gained in the grain business, consequently it is well equipped to take care of all their requirements for some time to come.

The main building is cribbed, and measures 28 feet wide by 44 feet long and is 30 feet in height up to the eaves. The cupola above the building measures 16 feet square. There are five large bins holding 20,000 bushels of grain, and conveyors take this grain from the bins to the elevator leg. Over the driveway there are placed four smaller bins, and there are three dumps, with conveyors running from them to an elevator leg. The building at the right is used principally for the storage of oats. This structure measures 34 feet by 36 feet by 14 feet high, and has a capacity of 25,000 bushels. A spout runs from the elevator head to the middle of the roof of the oats bin, so that it can be filled all the way up to the peak of the roof. A 50-foot conveyor delivers the grain from this bin to the elevator leg.

For conveyors a 12-inch 6-ply rubber belt is used, on which 11x6-inch pressed steel buckets are placed 10 inches apart. The elevator leg is 50 feet high, from the bottom of pit to the top of head. Power is

supplied by an 8-horsepower gasoline engine, of which the owners of the elevator are exceedingly proud. Well they may be, for, according to their account, it has been in active use for more than thirteen years and during that time it has never been out of order when the elevator had to be run, and less than one dollar has been spent on it for repairs.

Included in the equipment of the elevator is an 8-horsepower feed grinder and a 16-inch saw. The latter is used for sizing lumber and can be run by the gasoline engine simultaneously with 75 feet of conveyors and the elevator.

Oats and corn are handled exclusively, and the elevator is located in a highly productive country, where little competition exists. From 350,000 to 400,000 bushels of grain, equally divided between oats and corn, are handled every year, and this is "pulled" from a territory extending six miles west, three miles east, three miles north and three miles south of the elevator, embracing altogether 54 square miles.

The volume of grain exported from the port of Philadelphia this year greatly exceeded former records of grain shipments in the history of the city.

A hearing was held before A. R. Mackley, special examiner for the Interstate Commerce Commission, on December 13 and 14, at Sioux City, Iowa, at which evidence was submitted to show that Sioux City was discriminated against in favor of Omaha with reference to rates on grain shipments to the terminal markets. This was the second hearing, Sioux City having lost out in the first hearing.

[Special Correspondence.]

TRI-STATE GRAIN DEALERS MEETING

The monthly meeting of the Tri-State Grain Producers' and Dealers' Association, was held at Lima, Ohio, Friday, January 10. The attendance was exceptionally good, due, in part, to the fact that the Ohio State Corn Show was held at Lima during that week. Many grain shippers were in attendance at the Corn Show, the success of which was due in no small measure to their active efforts in promoting interest among the farmers of their respective communities.

President S. L. Rice, of Metamora, presided at the meetings. The morning session was devoted to the discussion of problems uppermost in the minds of all shippers of grain at this season of the year—movement of the corn crop, the car situation, condition of the corn, etc. Everyone said that the corn had not commenced to move. The car situation has been so acute over the entire territory that it has been impossible to do a great amount of shipping; and, what has caused grain dealers the least worry, is that the farmer has not been inclined to sell much corn at the present prices. Most of the corn is now gathered into the farmers' cribs, although there is a small amount still in the fields. It was said that farmers everywhere are using unusual care this year in handling the corn crop. Many new cribs have been built and most corn is well protected from the weather. All of this is very encouraging to the country shipper. There has been quite a large movement of oats throughout the territory during the past three weeks, and the quality is much better than earlier in the season. The car supply is becoming better every day. Most railroads seem to have a fairly normal supply of cars, with reports of more empties being delivered.

At the afternoon session Sec'y Riddle spoke to the dealers regarding their interest in the Ohio State Corn Improvement Association. The grain dealers of Northwestern Ohio have always given their best support to everything which tends to improve methods in growing and handling of grain. A resolution was passed commending the work which is being done by the Ohio State Corn Show, and pledging the support of the Tri-State Grain Producers' and Dealers' Association.

A plan was adopted at this meeting for promoting the work of the local associations throughout the territory. More good will be accomplished by frequent local meetings. They are more convenient for the average dealer to attend, the aggregate attendance will be larger, the interest will be keener because the result of the work at these meetings will be a local benefit. There are seventeen locals in the territory covered by the association. It was decided to hold a banquet at a meeting of each of the seventeen locals within the next two months. Sec'y Riddle will have something good to say at each one of the meetings.

In the afternoon the grain dealers adjourned to the Corn Show, where Secretary Riddle made a talk to the farmers regarding "Their Relation to the Grain Dealer." He said that farmers have always talked of the great benefits of competition. Secretary Riddle pointed out that there is too much competition among country elevator operators. There are three times as many elevators as are needed to handle all the grain conveniently and at lowest possible cost. If every elevator operator could handle twice the volume of grain, he could handle it on a smaller margin of profit. When the farmers of a community organize and build an elevator, they are simply increasing the competition and making it more difficult to secure a living profit. Mr. Riddle said that the average country grain shipper is buying on the smallest possible margin. What is needed is co-operation between the farmer and the grain dealer.

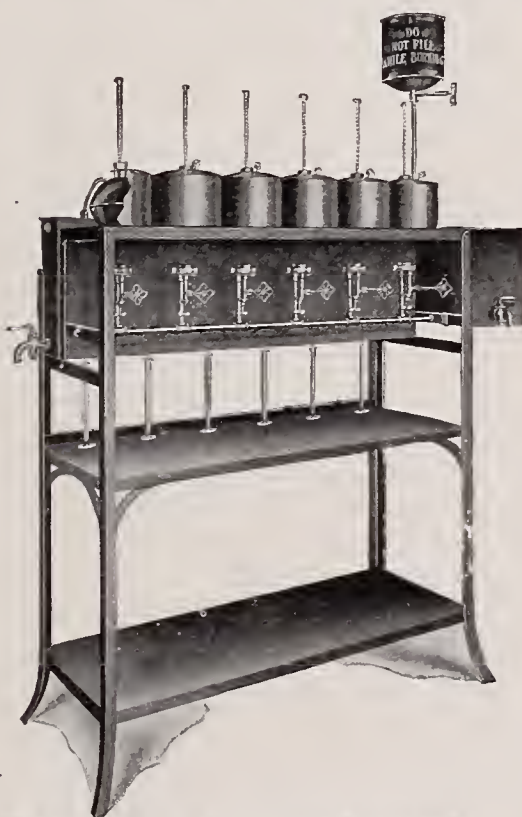
Among those present were: J. M. Adam, of Rosenbaum Brothers, Chicago; Bert Ball, of Chicago; G. A. Hax, of G. A. Hax & Co., Baltimore; Col. E. L. Southworth, of Toledo; C. O. Garver, of Grain Dealers' Fire Ins. Co., Columbus, O.; J. W.

Smith, of U. S. Grain Standardization Bureau, Decatur, Ill.; O. E. Richardson, Celina; W. G. Poast, Columbus Grove; L. C. Allinger, Delphos; Fred Botzum, Delphos; Otto Lang, Delphos; W. T. Dolby, Delphos; A. L. Garman, Delphos; Kirby White, Harrod; S. L. Rice, Metamora; E. G. Odenweller, Ottoville; D. R. Risser, Vaughnsville; C. W. Pierce, Van Wert; J. E. Wells, Quincy; John Nutter, Renollett; E. T. Custenborder, Sidney.

AN IMPROVED MOISTURE TESTER

The original moisture tester as planned and patented by Edgar Brown and Dr. Duvel, at that time connected with United States Agricultural Department, was very crude and rough in workmanship, light in construction and inconvenient in form. Our illustration shows the Brown-Duvel Moisture Tester with Hess improvements, as it is manufactured today by the Hess Warming and Ventilating Company of Chicago, Ill.

The machine shows its strength, compactness and attractive appearance. The Hess company put enough metal into it to make it solid and strong. A strong steel stand was put under it to bring it to a proper level for ease in operation. In this stand



THE BROWN-DUVEL MOISTURE TESTER WITH
HESS IMPROVEMENTS.

two capacious steel shelves have been added which gives great convenience for storage of accessories such as samples, etc. A tank has been added at the side, for testing oil, with faucet. This tank has a strainer top into which the flasks are emptied. It is lifted out and dumped when full of corn, and the oil is left ready for use. The tank will fit old testers and is supplied free to the company's older customers.

The floor space required has been cut down one-third, by so placing the receiving graduates that they may be watched and handled from the front, thus permitting the machine to be placed close to the wall, out of the way. The influence of draughts of air is less than when an open space must be kept entirely around the machine as draughts of air affect the accuracy of the test.

Copper flasks and tubes are used as these have been found to save a great deal of money by preventing breakage and loss of time and the operator can use gasoline, gas, alcohol or electricity thus adapting the machine to general use everywhere.

The Hess Warming and Ventilating Company guarantee the machine in all respects. Any further particulars will be sent upon request.

The revival of the export grain movement in the port of New York has been shown most distinctly by the reappearance of the floating elevators, which in the past few years have been rather few and far between.

[Special Correspondence.]

HAY TRADE CONFERENCE.

The Ohio State Hay Trade Association held a conference in Memorial Hall at Lima, Ohio, Thursday, Jan. 9th, which was attended by about fifty hay and grain dealers from all parts of the state and from the larger markets outside of Ohio. A very interesting program had been prepared, which included a grading contest. This contest was held at Spencerville, located a few miles from the city. Many shippers tested their skill in grading hay, demonstrating what they knew and learning many things they did not know. Chief Inspector Dennis, of the Cincinnati Chamber of Commerce, was present to show the shippers what they must expect when shipping hay to that market.

President D. W. McMillen, of Van Wert, presided at the morning and afternoon sessions, and made a very interesting talk on the subject of "Hay." He spoke of the good and bad practices in the hay trade, the importance of integrity in buying and selling hay, and methods of handling and grading hay. Some other topics on the program were: "Why Hay Should be Bought on its Grade Merits," by J. V. Taylor; "Present System of Hay Inspection," by H. W. Robinson; "The Score Card Method of Grading," by S. B. Douglas; "Cincinnati, The Gateway to the South," by W. C. Culkins; "Why Hay Should be Bought Baled and Delivered," by E. W. Wasmuth; "County Hay Institutes or Conferences, Plan and Purpose," by Bert Ball.

An interesting feature of the meeting were exhibits of various kinds and grades of hay by the National Hay Association and the Cincinnati Chamber of Commerce.

Among those in attendance were: G. A. Hax, of Baltimore, Md.; H. G. Morgan, of Pittsburgh, Pa.; F. E. Fleming, of Cincinnati; W. C. Culkins, of Cincinnati; H. W. Robinson, of Cleveland; Chief Hay Inspector, E. F. Dennis, of Cincinnati; P. M. Gale, of Cincinnati; J. V. Taylor, Sec'y National Hay Association, Winchester, Ind.; E. M. Wasmuth, of Roanoke, Ind.; Bert Ball, of Chicago; J. R. Stafford, of Cincinnati; D. W. McMillen, of Van Wert; S. B. Douglas, of Lima; C. W. Pierce, of Van Wert.

DAVID S. SHELLABARGER DEAD.

The death of David S. Shellabarger, pioneer grain man of Decatur, Ill., occurred at Red Bluff, Cal., where he had gone in October to visit his daughter, Mrs. T. H. Ramsay, Jr. Soon after his arrival in California Mr. Shellabarger, in company with his sons-in-law, A. S. Crowder and T. H. Ramsay, and a party of friends, set out on a hunting trip. After his return to Red Bluff he became ill and following an illness of several weeks he succumbed to heart trouble on January 2.

Mr. Shellabarger has been one of the most conspicuous figures in the commercial life of Decatur for 56 years. A successful man of business, he contributed in a large measure to the prosperity and progress of the city. He went to Decatur in 1856 at the age of 18 and engaged in the lumber business. Later he successfully ventured in milling, having owned the Great Western Mill, which was taken over by the American Hominy Company in 1902. He, with his sons, W. L. and Lucien Shellabarger, extended their grain and milling interests to Kansas, where the company now operates a line of 35 elevators, in addition to a dozen or more in central Illinois.

Mr. Shellabarger was born in Maryland on July 11, 1837, and was of Swiss and German descent. He was reared on a farm, but at an early age he got the western fever and, borrowing \$65 of his father, left for Illinois, which was considered a western state at that time. During his business career at Decatur he had served on the City Council and the School Board, and at one time was mayor of the city. He had also been actively interested in church work and gave generously to philanthropic movements. He is survived by two sons, W. L. Shellabarger, a prominent grain buyer at Decatur, and Lucien Shellabarger, and three daughters.



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon applications.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, JANUARY 15, 1913.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

AN UNWISE PROPOSAL

To those who have watched the growth of the co-operative elevator business the proposal to establish a co-operative commission company in one of the terminal markets, made by a speaker at the Omaha convention of the Nebraska Farmers' Grain and Live Stock Association, does not come as a surprise. It is the natural result of pseudo economic reasoning that seeks to eliminate the middleman without counting the cost.

The plan outlined by the speaker, the manager of a farmers' company, contemplates the organization of a commission company owned and controlled by the farmers' elevator companies tributary to the market in which it is located. Although the profits of the company are to be turned back to the local companies in proportion to the amount of grain they have sold or consigned to the commission company, they are not to be obligated to ship to it "to the detriment of their own bank account."

The advantages that would accrue to the farmer companies from the operations of the commission company are not clearly apparent. It is pointed out that the duty of the management would be to advise its constituents regarding market conditions, "assist in the collection of railroad claims, fight their battles in the terminal markets and work for them through the state railway commissions and interstate commerce commission for equitable railroad rates from the local elevator to the consumers and mills," all of which service is now rendered by reliable brokerage firms in each market, and for a nominal commission charge.

While it must be admitted that the co-operative elevator is an important factor in the grain trade, it is well to remember that farmers' com-

panies have been successful only insofar as their operations have been governed by well-recognized business principles. The way the co-operative movement has traveled is strewn with wrecks of enterprises whose promoters presumed to disregard economic laws. The successful ones owe much to the disinterested counsel of the commission houses it is now sought to eliminate.

AN IMAGINARY NEED

A Des Moines paper has discovered that Iowa farmers have lost, and are losing, enormous sums because the state has no warehouse law and no public warehouses for the storage of grain. It gravely asserts that Missouri, Minnesota, Indiana and Illinois all have public warehouse laws and because of this the farmers in these states market their grain under advantages not enjoyed by the Iowa tillers of the soil.

It is admitted that there are many private elevators in Iowa, but these, it is naively asserted, are not compelled by law to keep open, and their weights and grades are not subject to state inspection. With the establishment of public warehouses, it is pointed out, the farmer would be able to store his grain, hypothecate the warehouse receipt and wait for a satisfactory price. And it is asserted in all seriousness that state warehouses would have saved the farmers of Iowa \$105,000,000 in 1911 had all of the grains raised been stored and then sold at the highest market price of the year.

It is not, however, explained where the public warehouses are to be located, or how the farmer tributary to a country shipping station is to be benefited. Perhaps the writer has an idea that with the passage of a warehouse law all local elevators will be turned into public warehouses, with a state inspector assigned to each. Of course, the suggestion is absurd and simply serves to show the author's ignorance of the subject on which he attempts to write. It would not be worthy of serious consideration except for the effect of this kind of twaddle on the minds of the grain man's customers.

FEDERAL VS. STATE CONTROL OF RAILROADS

The Supreme Court on January 6 handed down a decision which limits the power of the states over railroads and makes it apparent that shippers must look to Congress rather than to the legislatures of the several states for relief in traffic matters.

A decision holds that since the passage of the Carmack amendment to the interstate commerce law in 1906, the states have ceased to have the right to annul contracts between railroads and shippers limiting the liability for loss of interstate shipments. It is also held that the states have no power to penalize railroads for failure to furnish cars for interstate shipment. The Minnesota reciprocal demurrage law, authorizing the recovery by shippers of a dollar a day for every day during which the railroad failed to furnish a car for the removal of freight, is declared unconstitutional.

The Court takes the position that in the passage of the Carmack amendment Congress had manifested its intention to deal with the subject

of carrier liability for interstate shipments and in consequence state laws must give way. It holds that the federal law, as expressed in the Carmack amendment, deals with the damage of railroad shipments and does not prohibit contracts limiting liability in return for a low rate. As to the reciprocal demurrage law for interstate commerce, the Court says the Hepburn rate law expressly fixed the duty of carriers to furnish cars and this prevents the states from acting further in the matter.

While the decision nullifies the efforts made by the grain trade to secure railroad reforms through state laws, it makes plain the direction their efforts should take in obtaining the relief to which they are entitled.

THE COTTON CORNER DECISION

Contrary to expectations, the United States Supreme Court has sustained, in effect, the Government's contention that the cotton "corner" engineered by James A. Patten and others in 1910 was a violation of the Sherman anti-trust law and the case has been remanded to the Circuit Court for the Southern District of New York for trial. Because of the faulty nature of the indictments the Department of Justice does not expect to secure convictions and the decision of the Supreme Court is, therefore, important only in its bearing on future attempts to corner commodities of general consumption.

In reviewing the findings of the lower court the Supreme Court assumed that every element of "running a corner" was present in this case, but the opinion leaves the parties free to present the question to the District Court for its decision. The more important point of whether a conspiracy to run a corner in a staple commodity normally a subject of interstate commerce is a violation of section 1 of the anti-trust act is treated at length.

In deciding this question affirmatively the Court states that this section of the Sherman law is not confined to voluntary restraints, as where persons engaged in interstate trade or commerce agree to suppress competition among themselves, but includes as well involuntary restraints, as where persons not so engaged conspire to compel action by others, or to create artificial conditions, which necessarily impede or burden the due course of such trade or commerce or restrict the common liberty to engage therein.

It is held that while running a corner may tend to stimulate competition for a time, this does not prevent it from being a forbidden restraint, as it also operates to thwart the usual operation of supply and demand, to withdraw the commodity from the normal current of trade and to enhance the price artificially and hamper users and consumers. The statute does not apply where the trade or commerce affected is purely intrastate, nor does it apply in interstate commerce unless the effect thereon is direct. The Court, however, finds no difficulty in applying these tests to the present case.

The decision says, in effect, that the conspiracy to corner cotton was for the purpose of controlling the supply of an interstate commodity for the purpose of enhancing its price and that in its operation of the corner would directly and materially impede and burden the

due course of trade among the states and therefore inflict upon the public the injuries which the anti-trust act is designed to prevent.

While the Patten case will now go back to the lower court and be tried on its merits, the decision of the Supreme Court is of the greatest importance to the grain trade. If, as the decision portends, the government has in the Sherman law an effective means of preventing corners, there can be no possible excuse for legislation to abolish option trading, since corners and their attendant evils have been the arguments on which all anti-future agitation has been based.

TRANSPORTATION COMMITTEE WINS

The Transportation Committee of the Grain Dealers' National Association, under the chairmanship of Henry L. Goemann, has been victorious in its fight for a modification of the rule of the Official Classification Committee in the matter of grain car minimums. Acting on a resolution adopted at the Norfolk convention of the Grain Dealers' National Association, Chairman Goemann succeeded in bringing the matter to the attention of the Interstate Commerce Commission, with the result that an order was issued amending the rule so as to permit the use of cars of less capacity than the prescribed carload minimums for grain.

The amendment provides that the shipper must order cars of weight capacity equal to or in excess of the established minimums and whenever practicable the railroad is bound to furnish cars of the capacity ordered. If such cars are not available the carrier is permitted to supply smaller cars and the minimum weight to be charged thereafter will be the marked capacity of the car. In no case, however, is this weight to be less than 40,000 pounds. Although the shipper may not order cars of less than minimum weight capacity, he is not prevented from loading larger cars to their full capacity, and the load will be taken at its actual weight, subject to the specified minimum.

This modification of a rule that has been the source of great annoyance and considerable financial loss to the grain trade is naturally gratifying to the officers of the Grain Dealers' National Association, as it will result in materially overcoming the car shortage which has hampered country shippers during the movement of the present crops. It has made available for use in grain traffic a large number of small capacity cars and will permit of a more liberal movement of grain than would otherwise come forward.

ELEVATION ALLOWANCES LEGAL.

Reluctantly, it is presumed, but inevitably, the Interstate Commerce Commission has bowed to the Supreme Court and ruled that railroads can, for competitive reasons, make elevation allowances to shippers where no service is performed, thus legalizing a practice which it is believed has been more or less general since the decision in the Peavey case. The ruling of the Commission was in the case of Gund & Co. vs. the Chicago, Burlington & Quincy Railroad Company, and is published in full elsewhere in this paper.

Under decisions of the Supreme Court in the

Peavey and Updike cases it was held that allowances are permissible where an elevator renders service to a carrier or furnishes any of the instrumentalities used in transportation, but the ruling of the Commission in the present case declares that railroads can legally make such allowances at competitive points although no actual elevation of the grain takes place. This, the Commission holds, is the only ruling that could be made under the third section of the interstate commerce act as interpreted by the Supreme Court.

The decision is one of great importance to the grain trade since, in a measure, it again opens up the whole subject of elevation-in-transit allowances. In fact, it makes legal a practice which may become more burdensome than those of the old days when it was difficult to distinguish between an elevation allowance and a rebate. The Commission admits that Gund & Co. were discriminated against by reason of the elevation allowance granted their competitor, but is powerless to prohibit this discrimination. The effect of this ruling is bound to be felt at many points, inasmuch as it permits the railroads to destroy competition in the grain trade in order to maintain it among themselves.

CAR SHORTAGES AND TERMINAL FACILITIES

That inadequate terminal facilities are more responsible for freight congestion than the lack of rolling stock was the statement made by James J. Hill at a meeting of railroad men in New York recently. He called attention to the fact that the terminals at our great central markets have not been enlarged in proportion to the increase in freight traffic and pointed out the danger of permitting this condition of affairs to continue.

In 1909 the freight ton mileage of the country grew eleven times as fast as the trackage and five times as fast as the equipment, and this ratio is subject to increase rather than decrease. It will be much greater in this year of large crops and added tonnage.

The assumption that a larger supply of cars is all that is needed to handle the increased tonnage due to a big crop or a general revival of business is refuted by Mr. Hill. He declares that what is really needed is the greater movement of cars. The average movement of a freight car is twenty-four miles per day. This means that the car is moving but two hours out of the twenty-four. Delays in loading and unloading are partially responsible for the lost time, but much of it is consumed in getting into, out of or through terminals where there is not track room to handle the cars.

The congestion that has resulted from the large receipts of grain at many of the terminal markets during the past month bears out Mr. Hill's contention that increased facilities are needed at these points, but whether the present supply of freight cars is sufficient to handle the growing business of the railroads, even with enlarged terminal facilities, is open to question. Nor is Mr. Hill's conclusion that unless the railroads are permitted to raise their rates they will be unable to make needed terminal improvements to be accepted as an unbiased judgment.

KANSAS INSPECTION LAW A FAILURE

It is understood that an effort will be made to amend the Kansas grain inspection law at the present session of the legislature. The law provides for inspection and weighing of grain at all points within the state where, in the judgment of the chief grain inspector, there is sufficient business to warrant the expense of maintaining a deputy inspector and weighmaster. It has always been more or less of a farce and for years the department has not attempted to supervise the weighing of grain at points outside of Kansas City, Kan. About the only redeeming feature of the law, it is declared, is the section which gives the seller the right to dispose of his grain by sample if he so desires.

It is proposed either to amend the law making the inspection of all grain compulsory or to amend it so as to eliminate the weighing of grain by the state unless requested by the shipper and giving the boards of trade at interior markets the right to inspect grain when desired by the shipper. The grain dealers of the state naturally favor the latter proposition, since it is conceded that competent inspectors under the supervision of the different boards of trade are more desirable than a political inspection department.

Reports from the Northwestern States indicate that a large amount of grain is being held in elevators and on the farm. Travelers for elevator companies say that not much more than half the grain in western Minnesota has been marketed, while line elevator men in North Dakota are holding immense quantities of grain for better prices.

It is admitted that corn is coming to market this season in better condition than it did last year, but this does not mean that the elevator owner can afford to take any more chances than he did when admittedly a large percentage of the crop was off-grade. So long as corn is subject to deterioration in transit and its condition at the primary market determines its keeping qualities just so long will the buying of corn be a business that requires sound judgment and careful attention.

The action of the Interstate Commerce Commission in restoring the rate on export grain from Missouri River points to the Gulf was so unexpected that it caught many grain men at Kansas City and Omaha with contracts for export shipment based on the low rate and necessitated a great deal of hustling to avoid serious losses. In fact, the manner in which the Commission handled this matter was a series of surprises to the grain trade. The reduced rates made by the railroads were to expire by limitation on December 1, but the Commission, holding that the carriers had demonstrated their ability to handle the business at the low rates, ordered them continued until March 31. Subsequently upon representations made by grain interests at a hearing in Chicago, the Commission reversed itself and ordered the old rates restored, effective December 23. Naturally shippers were up "in the air" in their efforts to square their transactions with the rulings of the Commission.

EDITORIAL MENTION

Oklahoma has declared war on the chinch bug and a state-wide effort is being made to stamp out this pest.

Canadian wheat shippers have begun to worry about the sweating of wheat going through the Panama Canal. Perhaps if their wheat was better cured before being sent to market, this danger would be lessened.

Offers for boats to carry grain from Duluth to Buffalo at the opening of navigation indicate a scarcity of grain vessels next season. Ore rates are high and grain shippers will probably have to bid up to keep vessel owners in line.

The Manitoba Grain Growers Company proposes to extend its operations into Alberta and will build sixty elevators in the latter province. The Alberta government announces that it will guarantee the bonds to be issued by the company.

At the conference of the Board of Directors and the Legislative Committee of the Grain Dealers' National Association, held in Chicago on December 16, both the Lever bill and the McCumber bill were denounced. The Pomerene bill was indorsed.

This is the season of the year when elevator operators, in common with other users of gasoline engines, experience trouble with jacket water freezing. There are a number of anti-freezing solutions that will prevent annoyance from this source.

Canadian grain moved this season with less complaint than for many years. There was practically no car blockade and no congestion at the head of the lakes. The harbors at Fort William and Port Arthur will be kept open by ice-breakers until January 20 for winter loading.

A factor in the grain trade is the rapidity with which the increasing yield of oats in this country goes into consumption. The record crop of 1912 (1,418,337,000 bushels) is being absorbed so fast that the visible supply has been below normal for some time.

Never has there been so much interest in improved corn as has been shown this fall. The number of corn shows has increased remarkably and there is hardly a section that does not boast of a corn club. The movement for more and better corn in the South is especially noteworthy.

Complaint has been made to the North Dakota Railroad Commission by the Farmers' Equity Exchange that elevator owners are stamping storage tags with an obligation on the part of the holder to sell his grain at the local price. It is declared that this practice is illegal and that farmers are losing large sums of money because the local prices are from 3 to 4 cents below the market of the Twin Cities. Whether or not there is any justification for this complaint, a definite agreement of this

nature between buyer and seller is more equitable than the practice of many sections, in which the elevator operator practically gives the farmer a "put" for which he receives no compensation.

The export movement of grain from Baltimore during the last year four months of the old year were sufficient to tax the capacity of the elevators at that port. The oats exports were especially heavy, making up for a somewhat disappointing business in wheat and corn.

J. W. McCord, secretary of the Ohio Shippers' Association, agrees with James J. Hill that railroads could meet all traffic requirements with their present equipment if terminal facilities were not so greatly inadequate. At the same time there is a general complaint from the grain trade of the state that the carriers are lax in enforcing rules that would tend to alleviate the present car shortage, which is seriously affecting the movement of Ohio grain.

The Appellate Court has reversed the finding of the Circuit Court which several months ago granted a temporary injunction restraining the J. Rosenbaum Grain Company of Chicago from storing its own grain in any of the six public warehouses it owns. The injunction was granted on the petition of Adolph J. Lichtstern and was to issue on the filing of a bond of \$100,000 by the latter. Inasmuch as this bond was never filed, the upper court holds that the injunction had never been "actually issued."

The International Congress of Chambers of Commerce at Boston adopted resolutions favoring bill of lading legislation along two lines, to-wit: (1) that the bill "must be binding upon the carrier whose agent has issued it, whether the goods have been received or not, after it has passed into the hands of an innocent purchaser; (2) it must be protected against forgery." The necessity of this legislation was considered only in the light of the exporting trade of the world, estimated at \$2,500,000,000 a week. This sounds immense—the volume is beyond human comprehension; yet the sum is only equivalent to the amount of merchandise handled annually in the United States on order bills alone.

Commenting on the influence of future trading on the grain business of the country, the Chicago *Inter Ocean* says that a careful compilation of figures for the primary movement this year of wheat, corn, oats, rye and barley show a total of nearly 850,000,000 bushels, or 193,000,000 bushels more than in 1911, handled at the western markets, and points out that not only this vast amount of grain, but millions of bushels additional, which moved between producer and consumer without coming to primary markets, was handled by taking advantage of the facilities which our grain exchanges afford. "Do the banking interests of the country realize that grain is safe collateral for loans, only because of the present methods available as protection to all handlers of grain through the regularly established exchanges? Do those entrusted with legislative power, and those in Government executive positions, realize the benefit to both producer and consumer of the pres-

ent system of handling grain for future delivery? If all fully realized it, there would be no agitation which would threaten to curtail the usefulness of the exchanges, but there would be a strong agitation for similar methods of trading in other necessities. Speculation is one of the greatest equalizers of values and its tendency is to minimize fluctuations and reduce profits to the middle man because affording him an opportunity to do business with reasonable safety on a small margin of profit."

Here is a case from Washington where grain inspection is in part optional. A certain farmers' warehouse company sold certain wheat which on arrival was "wet, mouldy and in a growing condition." The buyer sued to recover damages, which the trial court awarded. The farmers thereupon appealed to the Supreme Court, contending that plaintiff's recovery should not be allowed for the reason that it would subject its grain to the tests of the terminal inspectors; but the Supreme Court did not agree to that. Then there was a case in court at Chico, Calif., where a San Francisco buyer of 3,800 sacks of barley of a farmer at \$1.27½ per cental had to sue his seller, who held out 581 sacks when the price advanced and sold them to someone else at \$1.67. The defendant told the court he thought he needed the 581 sacks for seed, but found he did not and then sold at the advance; and the unsympathetic court made him pay damages. And there may be some more advocates of the recall of judges out there.

The grain blockade at Buffalo, which was so serious during the latter part of December as to result in the railroad superintendents being summoned before the Public Service Commission, was relieved to such an extent during the early part of the present month that the chairman of the latter body no longer considered it necessary to have daily reports from the elevators relative to the grain situation. There is no doubt that the blockade at the close of navigation was the most serious in the history of the port. At one time there were 53 grain carrying vessels lined up in the outer harbor, while twenty more were discharging their cargoes in the inner harbor. Grain interests contended that the railroads were lax in providing cars to move the rapidly accumulating grain and the Public Service Commission was appealed to for relief. At present conditions are nearly normal and elevators have reduced their forces. However, with the opening of navigation it is expected that there will be a recurrence of the congestion. There is said to be upwards of 20,000,000 bushels of Canadian grain at Lake Superior ports that will be started for Buffalo when lake shipping is resumed.

The regulations handed down recently by the Interstate Commerce Commission for the Illinois Central Railroad in the distribution of coal cars to miners, established a precedent which it is expected to follow in easing the grain car shortage. The commission held that on a day when a mine at a junction point orders no cars from another road it shall have its full rating on the Illinois Central; that when it orders from one other road it shall have 75 per cent of its full rating, and if it order from two roads, it shall have 50 per cent of its rating on the Illinois Central.

TRADE NOTES

The Barnard & Leas Manufacturing Company of Moline, Ill., remembered their friends in the holidays by pleasant Yuletide wishes and the hope of a happy and prosperous new year.

S. J. McTiernan, St. Louis representative of The Huntley Manufacturing Company of Silver Creek, N. Y., spent the holidays, together with Mrs. McTiernan and Edward Hollis McTiernan, with relatives in Chicago.

W. H. Eckhardt, in charge of the DeKalb County, Illinois, Crop Improvement Work in connection with the work of the Crop Improvement Committee of the Council of Grain Exchanges of North America has purchased from the Seed Trade Reporting Bureau a Brown-Duvel Moisture Tester for use in this work.

The Hess Warming and Ventilating Company Chicago, Ill., report the following sales of grain driers since the last list was published: McDonald & Co., New Albany, Indiana; Smith Bros. & Velti Company, Lake Odessa, Michigan; Cuba Coffee and Trading Company, Palma Soriano, Cuba.

The Stewart & Cook Manufacturing Company of Cincinnati, Ohio, has been incorporated with a capital stock of \$150,000 to engage in the manufacture of grain choppers, feed mills, etc. John G. Stewart, James M. Cook, John F. Scallan, Joseph F. Costello, and Fred S. Moore are the incorporators.

Geo. J. Noth, 402 Monadnock Block, Chicago, Ill., manager western office of Sprout, Waldron & Company of Muncy, Pa., was taken seriously ill early in January and was later operated upon at the Presbyterian Hospital for appendicitis. The operation was successful and his physicians advised him that he would be able to go to his home on January 12.

A reproduction of the painting by Thomas Moran, N. A., subject "When Venice Ruled the Sea," gives a very striking and handsome effect to the wall calendar sent out this year by Huntley Manufacturing Company of Silver Creek, N. Y. The painting is rich in color and will show a masterpiece in the office of the grain man as truly as that the Monitor machines are a masterpiece of service in the working plant. A copy of the calendar will be mailed to any dealer on request.

E. G. Heathcote, who has for many years ably represented the Nordyke & Marmon Company interests with the millers of Virginia, Maryland and the Carolinas has decided to take a year's vacation from active business life. His work has been taken up by J. B. Cooper of 705 Church St., Lynchburg, Va. Mr. Cooper formerly represented the Nordyke & Marmon Company in Kentucky and Tennessee and brings to his new territory a thorough knowledge of milling and milling machinery.

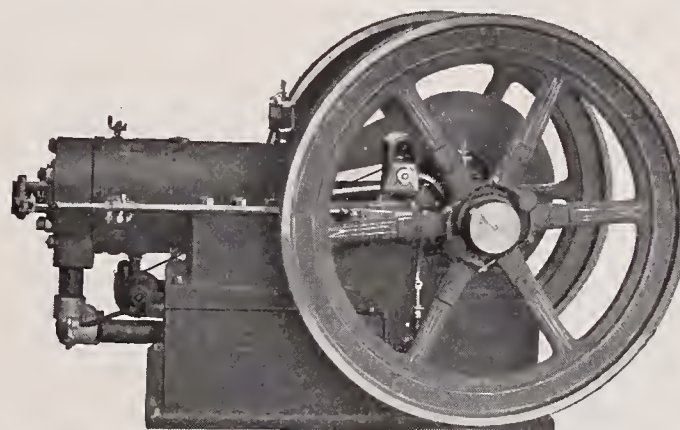
Visitors to the plant of Nordyke & Marmon Company, Indianapolis, Ind., have recently noted among other evidences of prosperity, the newly completed and furnished office building and drafting rooms. This new building more than triples the company's office and drafting room space and is fully occupied by the additional equipment and office staff necessitated by the present rush of business. The company is also planning on largely increasing its shop facilities, although it only last spring completed a two-story addition to one of its largest buildings.

At the annual meeting of the Barnard Manufacturing Company of Spokane, Wash., recently held at its office in that city, the following officers were elected: President, Thos. E. Casady; vice-president, A. J. Hesler; secretary and treasurer, F. H. Finley. Mr. Casady is the secretary and treasurer of the Barnard & Leas Manufacturing Company of Moline, Ill., and with Mr. Hesler, who is a resident of White Salmon, Wash., is largely interested as a stockholder in the parent concern. Mr. Finley has been in active charge of affairs of the Barnard Manufac-

turing Company for several years and will continue in that capacity.

The Strong-Scott Manufacturing Company, manufacturers and distributors of grain elevator and flour mill machinery at Minneapolis, Minn., have incorporated their business at Winnipeg, Man., with a capital stock of \$150,000. The Winnipeg plant which was started some time ago is located at 774 Dufferin avenue, and is fully equipped to make the smallest elevator bucket or the largest grain cleaning machine. The business at Minneapolis has had a very large growth this year, over last, and the company proposes to build up the Canadian business to very large proportions.

The Joseph Dixon Crucible Company of Jersey City makes the interesting announcement that the selling price of their Silica-Graphite "One Quality Only" Paint is reduced. They say they make this reduction because the decrease in the price of linseed oil, which is used as the vehicle, enables them to do it, and because it is their aim at all times to give their customers any benefit possible in reduction of price of materials. This well-known paint, which has been the standard for nearly 50 years with leading railroads and manufacturing plants as a maintenance paint, is a perfect, long



A LAUSON "FROST KING" GAS ENGINE OF RECENT DESIGN.

service protector of all exposed steel and metal surfaces.

A new booklet is just from the press on the Hess Improved Brown-Duvel Moisture Tester published by the manufacturers, the Hess Warming & Ventilating Company of Chicago. The booklet treats thoroughly of the manufacture and use of the tester showing the improvements made from the original Brown-Duvel Tester and gives complete directions for operating the machine. There are also illustrations of the Torsion Balance and the Hess Special Balance made from the Hess company's own design by Fairbanks, Morse & Co. It will prove a useful book for those now making, and those contemplating making the moisture test on grains.

The Williams Patent Crusher and Pulverizer Company of St. Louis, Mo., has now over 2,100 of their machines in operation. While their crushers and grinders are for almost every use, their special machine for the grain dealer and miller is the Williams Infant Grinder which grinds barley, oats, wheat, kaffir corn, screenings, shelled corn, alfalfa, etc. A very great interest is also being shown in their snapped corn pneumatic system and the pneumatic system of grinding and handling by air. They claim that air milling or pneumatic milling is the most practical form of feed milling ever devised. They will be pleased to send full particulars about the system on request.

Receipts of oats in Minneapolis since September 1 have amounted to 7,150,000 bushels, as compared with 3,400,000 bushels last year.

FROST KING PROGRESS

A new line of "Frost King" Gas and Gasoline Engines has been brought out during the past year by the John Lauson Manufacturing Company of New Holstein, Wis. In accordance with their usual custom these engines were made a very high grade, rather than a cheap and low priced line. The "Frost King" is now of uniform design and construction in all sizes and when a dealer has one size engine on his sample floor it is a representative of all engines in the Lauson line. The cylinder and base are cast separately. The cams run in a bath of oil and are enclosed in a dust proof case.

A gear driven, rotary, alternating, slow speed Sumter Magneto is built into the engine which starts the engine on a slow turn in any weather and entirely eliminates batteries, coils, etc., and wearing parts are of case hardened steel ground to size. The finish is better than ever and the engine makes a very pleasing appearance, especially in operation as every engine is accurately balanced and runs very smoothly. The cut herewith shows one of the latest Lauson Standard Stationary Engines for grain elevator use.

The "Frost King" has been in very heavy demand during 1912 and although the output was doubled the company has found it impossible to fill orders. Plans are being completed for a large factory addition to be erected early in the spring and the wheels will be kept humming during the Democratic administration. A large catalog of the Lauson "Frost King" line is in the hands of the printers and is to be one of the finest and most comprehensive gas engine catalogs ever published. One of

these will be mailed on request in addition to a valuable souvenir to all dealers who are interested in the "Frost King" and will write direct to the John Lauson Mfg. Company, New Holstein, Wisconsin.

HISTORY OF THE CORN BROOM

The ordinary house broom, made of broomcorn, dates back as far as 1786. Previous to that time husk brooms were used to sweep out the ovens, and splinter brooms made of birch, were employed for ordinary everyday purposes. The present broom industry had its beginning in Connecticut, in 1786, when Levi Dickinson, a native of Weatherfield, went to Hadley carrying with him a new kind of corn seed which he showed his friends, saying that when full grown it would make better brooms than ever had been made. The housekeepers of Hadley laughed at him, but despite this, Dickinson was not discouraged, and harvested his first crop of broomcorn, managing to scrape the seed from the brush with a knife and a hoe, after which he made his brooms.

He made the complete broom, including the handles, and grew his own flax for the twine, the whole costing him little. Believing that his neighbors would refuse to buy the new kind of broom, Dickinson in 1798 peddled his brooms in Williamsburg, Ashfield and Conway. The next year he carried them to Pittsburgh. The new brooms proved an immediate success, for as soon as housewives found how much better they were over the old husk or birch broom, they would buy no other. Other men went into the business and a new industry was born in Hadley. Dickinson lived until 1843, long enough to see the Hadley or corn broom in use all over the country, and the same broom, with improvements, is now extensively sold everywhere.

NEWS OF THE TERMINAL MARKETS

NEW OFFICERS IN BOSTON

The new officers of the Boston Chamber of Commerce are James J. Storrow, President; J. Randolph Coolidge, First Vice-President; Henry S. Denison, Second Vice-President; Danial D. Morss, Treasurer; D. O. Joes, Manager Transportation Department. James A. McKibben was re-elected Secretary.

ELECTION OF OFFICERS, CHICAGO BOARD OF TRADE

The annual election of officers on the Board of Trade of the city of Chicago was held January 6 resulting as follows: President, Edward Andrew, of the Nash-Wright Grain Co.; First Vice-President, Frank B. Rice of Star & Crescent Milling Co.; Second Vice-President, Albert E. Cross of Ellsworth & Cross.

Directors—Charles B. Quinn, C. H. Canby, John R. Mauff, John A. Rodgers, William L. Gregson.

Committee of Appeals—Edw. F. Chapin, L. C. Brosseau, Henry H. Newell, F. F. Breckenridge, Ashley O. Jones.

Committee on Arbitration—J. E. Brennan, Fred D. Stevers, Kenneth P. Edwards, James A. Begg, Chas. T. Hulburd.

EDWARD ANDREW

In connection with the election of Edward Andrew to the office of president of the Board of Trade of the city of Chicago on January 6, it would be ap-



PRESIDENT EDWARD ANDREW.

propriate to make use of the words, "Let him bear the palm who merits it." For Mr. Andrew has displayed an interest, an activity and zeal, in the Board's affairs during the past years second to none. He has served as chairman of the Weighing Committee for seven years; he was chairman of the Membership Committee for five years, and has been on the Market Report Committee for two years, and is now serving as its chairman. He became a director of the Board in 1905, serving two terms. He was elected second vice-president of the Board in

1911; first vice-president in 1912, and will serve as its president during the coming year.

Mr. Andrew was born in North Tarrytown, N. Y., in 1858. He attended school at Newark, N. J., where he resided for fourteen years up to 1877, when he removed to Chicago and engaged in the grain business with D. H. Baker. After ten years he became a member of the firm and the business was continued under the name Baker & Andrew. This business was merged with Nash, Wright Co. when that firm was formed in 1893, Mr. Andrew becoming its secretary. He retained this office when the business was reorganized as the Nash-Wright Grain Co., in 1910, and still holds that position.

As a member of the Market Report Committee and as chairman of the Membership Committee, Mr. Andrew did very effective work for the Board. He was very active in inaugurating the Custodian Department in connection with the Weighing Department, which is now running successfully and which is highly appreciated as safeguarding the interests of the banks and the country shippers as well.

NEW OFFICERS OF TOLEDO PRODUCE EXCHANGE

At the annual election on the Toledo Produce Exchange, held January 6, 1913, the following were chosen: For President, Fred O. Paddock; First Vice-President, Cyrus S. Coup; Second Vice-President, John A. Smith; Secretary, Archibald Gassaway; Treasurer, H. Wallace Applegate.

Directors—Frank I. King, Fred Mayer, Edw. L. Camp, David Anderson, E. L. Southworth, Henry W. Devore, Frank W. Annin, William E. Tompkins, Henry D. Raddatz, Frank R. Moorman.

Committee of Arbitration—J. W. Young, G. D. Woodman, L. A. Mennel, W. H. Haskell, F. W. Jaeger, K. D. Keilholtz, C. W. Mollett.

Committee of Appeals—H. L. Goemann, R. L. Burge, F. C. King, G. J. Ruddy, A. W. Boardman, O. H. Paddock, D. B. Noyes, R. P. Lipe, H. R. Devore, C. S. Burge, C. Rockwell.

F. O. PADDOCK

F. O. Paddock, who has been one of the most prominent figures in the cash grain business of the Toledo market for over 25 years, was elected president of the Toledo Produce Exchange at the annual election held January 6.

Mr. Paddock removed to Toledo from Illinois in 1886 and has been continuously engaged in the grain business since that time. He served the Exchange as its president in 1894 and served as vice-president four times since that time, declining the office of president two or three times as he thought there should be prominence given to some of the younger members who were entitled to recognition. With his consent to serve another term he was unanimously elected to that office for the coming year.

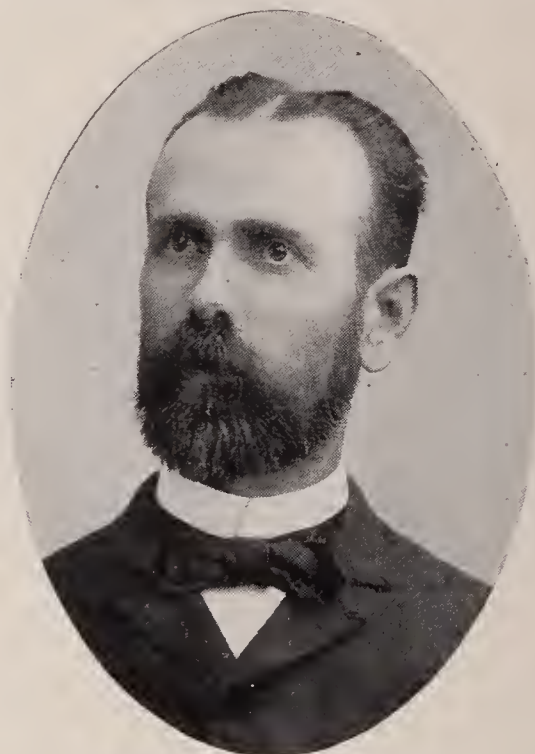
The following are some of the statements and recommendations made in a speech to the members of the Exchange by Mr. Paddock, at the time of the announcement of the election on Tuesday, January 7:

Members of the Exchange, Gentlemen:

For years I have advocated working in harmony to build up our market. Work together, all pull together. Don't let petty jealousies keep you from rejoicing over the success of your neighbor, for the greater the success of each firm, the larger the volume of business passing through our market—the greater are the opportunities for each and every firm to share in the increased prosperity sure to follow in the wake of larger business.

If the volume of business is to be doubled in 1913, as I hope it will be, we need additional elevator ca-

capacity properly to take care of it. I leave it to you to say, why and where, and when it shall be built. We have been trying for years to secure uniformity of inspection of grain in all primary markets. Our department under Chief Culver has fairly and honestly lived up to the spirit and the letter of the uniform grade rules, recommended by him to the National Grain Dealers Association and adopted by our Exchange in good faith, but from my own observation and all the information I have been able to gather, all the other primary markets have adopted the uniform grade rules in phraseology only, and



PRESIDENT F. O. PADDOCK.

have kept right on inspecting and grading grain to suit their own markets and the requirements of their particular territory, and not only so, but some of them have invaded our territory and taken thousands of cars of grain naturally tributary to this market, because of more liberal grading in competing markets. I am not in favor of lax inspection of grain—but when you have an efficient Chief Inspector, as you have in Toledo, I am in favor of a more liberal interpretation of the Rules by the inspection department. Just so long as human judgments differ—just so long as selfish interests in mankind predominate—just so long as soil conditions and climatic surroundings are not identical in every respect in all sections of the country, just so long will it be practically impossible to secure uniformity of inspection of grain in all the markets of the country. I am therefore heartily in favor, the coming year, of our inspection department being operated wholly and independently in Toledo, for Toledo, and in the interests of Toledo territory and for the increase of business in this market.

I am also in favor of the Government standardization of all grades of grain and the supervision by Government Commission during the movement of each cereal during the year at all primary markets. I hope our new transportation committee will take up the work where it now stands and soon push it to a successful issue, and either secure reshipping rates out, and specific rate into Toledo, in accordance with the complaint now in the hands of the Interstate Commerce Commission for hearing, or failing in that, secure through routes and divisions over all lines in and out of this market. I believe it can be done and it must be done if we are to maintain Toledo as a primary market and as the great winter wheat market of this, the center of the winter wheat territory.

Let us then set our mark high for 1913. The volume of business declined constantly and with great regularity from 42 millions in 1900 to 11½ millions in 1909. For three years now it has been gradually crawling up again.

I wish to say just a word of encouragement to our younger members, who have been so active the past year, for to their activity and enthusiasm much of our success the past few years is due. I wish to congratulate you all that in spite of a loss of over one hundred million bushels of winter wheat in our own territory, the receipts of grain last year were nearly fifteen million bushels. If there's luck in odd numbers according to Rory O'Moore, then in this year of 1913, let's set our mark for twenty-three millions the coming year instead of fifteen.

INCREASED EXPORTS FROM BOSTON

The grain exports from Boston during the past year totaled 2,074,741 bushels more than in 1911, shipments amounted to 17,547,376 bushels of wheat, corn, oats, rye and barley, as compared with 15,472,635 bushels during the previous year. The grain exports included 14,418,620 bushels of wheat, 1,763,921 bushels of corn, 1,135,367 bushels of oats, 186,041 bushels of rye and 43,427 bushels of barley. Corn and oats were the only grains which went abroad in smaller quantity than in 1911.

INCREASE IN ALL GRAINS AT OMAHA

The amount of grain handled on the Omaha Grain Exchange the year just closed, showed a decided increase over that of 1911. There was in the wheat receipts an increase of over 4,500,000 bushels. Oats increased over 3,500,000 bushels, and corn 1,000,000 over the previous year. The total receipts of wheat, corn, oats, rye and barley amounted to 51,534,600 bushels showing an increase of practically 6,000,000 bushels over the receipts of 1911. Shipments were 42,000,000 bushels as against 33,000,000 bushels for 1911.

NEW ORLEANS' GRAIN EXPORTS INCREASE

Large increases in the wheat exports of the port of New Orleans over 1911 are shown in the reports from the New Orleans Board of Trade. For the year closing December 30, the total amount of wheat handled for export was 7,580,587 bushels as compared with 223,722 bushels for 1911. The records further show that of this increase of 7,356,865 bushels of wheat the receipts of the Texas and Pacific lines through Westwego elevators for 1912 were 6,208,760 bushels. In addition to this, the Texas and Pacific lines hauled into New Orleans 50,422 bushels of corn.

ELECTION AT KANSAS CITY

The election held January 8, by the members of the Board of Trade of Kansas City, Mo., for officers, directors and arbitration committee, resulted as follows:

R. J. Thresher, president; D. F. Piazzek, vice-president. Directors—Oliver Denton, H. P. Ismert, T. F. McLiney, B. C. Moore, A. R. Pierson, Paul Uhlman.

Geo. A. Aylesworth, who was second vice-president for the year 1912, becomes first vice-president under the rules of the Board. Six directors were held over from last year as follows: W. C. Goffe, B. F. Hargis, G. A. Moore, Chas. T. Neal, O. A. Severance, Thos. R. Smith.

OFFICERS OF PEORIA BOARD OF TRADE

At the annual election held on January 13, the following were elected officers of the Board of Trade of Peoria, Ill.:

President, J. H. Ridge; vice-presidents, N. R. Moore, J. W. Hendley; secretary, John R. Lofgrin; treasurer, Walter Booker; directors, A. G. Tyng, Peter Casey, C. C. Miles, W. W. Dewey, D. Mowat, T. A. Grier, Louis Mueller, C. H. Feltman, Theo. G. Mueller, B. E. Miles; committee of arbitration, E. S. McClure, C. L. Daley, Geo. L. Bowman, all two years; committee of appeals, Wm. S. Miles, J. W. Byrne, T. J. Pursley, all two years, and George Brier, one year, to fill vacancy.

GOOD SHOWING AT TOLEDO

The grain market of Toledo, Ohio, suffered a handicap during 1912 owing to the fact that the winter wheat crop was a practical failure throughout the section from which the market draws the major portion of its wheat.

Yet despite this fact the total receipts of grain during 1912 from figures compiled by A. Gassaway, secretary of the Produce Exchange totaled 14,679,200 bushels, compared with 15,108,300 bushels in 1911. Increases were made in oats and rye, the principal losses occurring in wheat and corn. As a consequence of the large shortage in No. 2 soft red winter wheat, the local contract grade, there was, for the first time in the history of the exchange, more wheat received by water than by rail. About 3,609,000 bushels of wheat were deposited in Toledo

by lake carriers. Some of this was Chicago soft winter wheat but the bulk was spring wheat which local mills ground up very freely.

ST. JOSEPH BOARD OF TRADE ELECTION

William Burke, president of the Burke Grain Company of St. Joseph, Mo., will serve as president of the St. Joseph Board of Trade the coming year. F. R. Warrick of the Elwood Grain Company is the newly elected vice-president. Directors are J. L. Frederick, S. T. Wildbohn, J. W. Craver, A. J. Brunswig, T. P. Gordon, A. L. Tenquay, R. R. Clark, A. C. Muench, W. L. Harroun.

At a dinner at the Commercial Club, following the election of officers, one of the principal things spoken of was the need of a new terminal elevator in St. Joseph. Several of the railroad men present expressed their willingness to do their share financially in support of the project, and predictions were made that a large terminal elevator would be in operation before the close of the year.

MILWAUKEE HAS GOOD YEAR

The grain trade of Milwaukee for 1912 aggregated a very large volume according to H. A. Plumb, secretary of the Milwaukee Chamber of Commerce. The receipts of rye amounted to 3,000,000 bushels, a far greater quantity than ever before recorded for a corresponding period. Milwaukee is a great consumptive market for grain; manufacturing and other local demands absorb approximately 30 to 40 per cent of the receipts. A large jobbing business is also done with the East and with the trade in all directions from Milwaukee.

The actual volume of business transacted by Milwaukee dealers is not fully represented by the figures showing the receipts. There are many millions of bushels bought at one interior point and sold at another. Shipment is made direct and the grain does not come to Milwaukee. It is Milwaukee business, however, carried on by Milwaukee interests.

MERCHANTS' EXCHANGE OF ST. LOUIS ELECTS OFFICERS

The annual election of officers on the Merchants' Exchange of St. Louis took place January 8, resulting as follows: President, John L. Messmore; first vice-president, Marshall Hall; second vice-president, Roger P. Annan, Jr.

Directors: Christian Bernet, Chas. L. Neimeier, Cary H. Bacon, W. H. Toberman, C. A. Morton.

Committee of Appeals: Thos. K. Martin, W. E. Smith, F. Deibel, Maxwell Kennedy, Erich Picker, Jas. A. Connor, Gilbert Sears, F. W. Seele, John O. Ballard, Ludwig Hesse, Hugh Ferguson.

Committee of Arbitration: B. J. McSorley, Otto J. Schulz, Adolph Corneli, Fred Hattersly, H. E. Papin, Fred A. Sieving, Louis F. Schultz, Thos. B. Gettys, R. J. Pendleton, E. L. Waggoner.

The amendments and additions to the rules of the St. Louis Merchants' Exchange as published in our December issue were adopted by the members on December 23.

LARGE RECEIPTS AT MINNEAPOLIS

The grain receipts at Minneapolis for 1912 exceeded those of 1911 by almost 26,000,000 bushels, at the same time largely exceeding those of previous record breaking years. The biggest increase was in the wheat receipts, followed by oats and flax, respectively. The only decrease was in corn, which fell below last year's receipts by 1,825,000 bushels.

The directors of the Milwaukee Chamber of Commerce, in the latter part of December, voted to amend its rules so as to provide that warehouse receipts in other markets are deliverable there, providing that at the time of the sale the name of the warehouse into which the grain will be shipped is specified. A few years ago such a rule was in force, but was amended to read that all deliveries should be made from Elevator "A," Milwaukee.

With an additional purchase of two moisture testers, of six burners each, Chief Grain Inspector Tompkins of the Peoria Board of Trade can now handle 36 cars at once. As it requires thirty min-

utes to make the test, his department can handle 72 cars an hour.

Walter E. Smith was recently elected chairman and Harry J. Wood, vice chairman, of the Grain Board, a new organization in the Boston Chamber of Commerce.

NEW OFFICERS FOR SOUTHERN ASSOCIATION

The officers for 1913 of the Atlanta Grain Dealers' Association are: Joseph Gregg, Sr., president; J. J. Russell, first vice-president; Almore Morgan, second vice-president. Board of directors—Tully J. Brooke, E. A. Holbrook, G. C. Rogers, J. Le Roy Duncan. The annual report of the association showed a very prosperous grain business done by members for 1912, and the organization is in a satisfactory condition in financial as well as other respects.

THE SITUATION IN MAY CORN

Southworth & Co., of Toledo, have the following to say on May corn in their special letter of January 8:

"May corn this year presents some exceedingly interesting angles. It already has recovered three cents from the November lows due to the Government's statement of record-breaking crops of all feed-stuffs. Many investors who placed their buying orders too low, are still 'waiting, fondly waiting.' Will the early lows again be reached? There's the question. Car shortage curtailed the early movement, and while it has since grown to large proportions, the arrivals have been well taken care of, and the visible supply has not yet totalled six million bushels.

"The first five months of the year show an upward trend. As a rule, less than 20 per cent of the crop leaves the farm. The United States produces 90 per cent of all corn raised, but is normally far behind Argentina, a comparatively insignificant producer, in the way of exports. American farmers find the most profitable disposition of their corn is for feeding purposes. This year, however, feeding requirements are below par and the surplus states have an unusual abundance. The seven principal states produced 1,870 million, or 430 million more than the preceding year. This difference becomes a huge question mark in the investment situation when it is noted as being more than twice the average total received at primary points throughout the year; for it is the extra supply that will become a determining price factor between now and the end of May.

"Our exports are a comparatively small amount of our total production; but they are a large proportion of primary receipts—generally from 20 per cent to 30 per cent. This is where the surplus takes on added importance. Annual receipts in the eleven terminals comprising the primary markets—Toledo, Chicago, Milwaukee, St. Louis, Kansas City, Detroit, Duluth, Minneapolis, Peoria, Indianapolis and Omaha, have ranged from 153 to 227 millions in the past six years, while exports over the same period have ranged from 35 to 85 million. Chicago gets on an average 50 per cent of all primary receipts, largely because it is the market for Iowa and Illinois, which raise 25 per cent of the total.

"Chicago May corn has sold in the forties between the first of January and the last of May during three of the last seven years, but in each instance it has rebounded to fifty or better, and with one exception has finished above the half-dollar mark.

"Our corn exports are heaviest during January, February and March, after which we feel the competition of Argentina, whose crop is harvested in March. Present condition of Argentina is excellent.

"The United States corn visible generally increase until April, when reductions are in order. Largest visible in recent years was 16,208,000 in March, 1906. It frequently goes below two million in November and December.

"In summing up the situation the increasing use of corn for commercial purposes must be considered. There are said to be 132 such uses—for alcohol, beer, whiskey, glucose, corn oil, gluten food, starch, oil meal, molasses, coffee substitute, many varieties of breakfast food, etc."

CHANGES IN MEMBERSHIP

Chicago.—Secretary J. C. F. Merrill reports that during the month of December the following new members were received into the Board of Trade: Robert E. L. Sunderling, Wm. J. Buttschau, Wm. A. Bochmann, Frank E. White, Jesse Briegel, Fred-eric R. Burrows, Garfield T. McLean, Benjamin E. Loveland. Transfers were granted to Leander M. Locke, Theodore H. Waterman, Est. of Miles B. Crafts, Henry J. Aaron, Herbert A. Baughn, Est. of Frederick R. Warner, Wm. Larson, Hiram S. Bicket, and Est. of Wm. S. Crosby.

Duluth.—Secretary Charles F. MacDonald reports C. S. Moore as a new member of the Board of Trade for December and W. R. McCarthy, withdrawn.

Milwaukee.—Secretary H. A. Plumb sends us the following new members admitted to the Chamber of Commerce since our last issue: Paul M. Morris, August C. Kurz. Memberships transferred were Chas. J. Chapin, Wm. M. Caldwell, Jacob E. Friend, deceased.

St. Louis.—Secretary Eugene Smith reports the following new members admitted to the Merchants' Exchange during December: Henry E. Theiss, Fritz Mark. Resignations were received of John J. Dale, F. W. Johnson and A. A. De Long.

San Francisco.—Statistician Wm. B. Downs reports E. S. Waugenheim of Simon Newman & Co., of Newman, Calif., a new member of the Chamber of Commerce.

Toledo.—Secretary Archibald Gassaway reports the following new members admitted to the Produce Exchange during December: J. C. Husted, of C. A. King & Co., Toledo, and A. S. Jackson, of Jackson Bros. Company, Chicago.

NOTES.

The Lonsdale Grain Company of Kansas City, Mo., has filed a statement increasing its capital stock from \$15,000 to \$50,000.

The Brokamp-Cavanaugh Company of Cincinnati, Ohio, has been incorporated to deal in hay and grain with a capital stock of \$10,000.

The Grain Exchange of Calgary, Alberta, is contemplating the erection of a new building. The business of the Exchange has had a steady growth since its organization in 1909.

A. H. Gillis, former county assessor of Wyandotte County, Kansas, is spoken of for the office of State Grain Inspector of Kansas, which has been held the past years by D. L. Gordon.

Rosenbaum Brothers, of 77 Board of Trade, Chicago, Ill., expressed their usual kindly greetings and good wishes to their many friends, during the holiday season, in an attractively printed folder.

C. O. Reynolds & Co., of Chicago, have incorporated with a capital stock of \$100,000 to do a general brokerage and commission business. The incorporators are C. O. Reynolds, M. H. McKillin, F. D. Reynolds.

Embossed ears of golden corn surmounted the yuletide wishes that Pope & Eckhardt Co. of Chicago, extended to their friends the closing year. A wreath of holly added to the attractiveness of the holiday greeting of this well known Chicago firm.

Shearson, Hammill & Co., of Chicago, announce that they have acquired and will continue the business and the offices formerly conducted by Piper, Johnson & Case in the Chamber of Commerce Building, and the McKnight Building at Minneapolis, Minn.

A desk calendar of attractive appearance is a holiday gift from the St. Louis office of Goffe & Carkener Company of Kansas City, Mo., G. C. Martin, manager of the St. Louis office, is one of the popular, well posted grain men of that market.

On January 1, the T. A. Jennings Co. and Owen & Jennings of Lynchburg, Va., consolidated under the firm name of Jennings, Owen & Jennings. The capital stock of the new company is \$75,000. The officers are T. A. Jennings, president; John T. Owen, vice president; Clyde Jennings, secretary. The company will operate the large storage warehouse

and elevator formerly occupied by the T. A. Jennings Company. The warehouse has a storage capacity of 150 cars of feed and hay, and the elevator a capacity of 25,000 bushels.

Friends of D. V. Heck of Hardman & Heck, Pittsburg, Pa., will be able to visit him in the near future in a new and handsome residence. A home site was recently purchased by Mr. Heck opposite the entrance to Schenley Farms Terrace, and plans have been completed for a modern home.

The following were appointed by President Frank M. Bunch as representatives of the Chicago Board of Trade to the Chamber of Commerce of the United States of America for one year: H. N. Sager, J. C. F. Merrill, C. B. Pierce, Robert McDougal, C. H. Canby, S. P. Arnot, R. G. Chandler, W. L. Gregson, B. A. Eckhart.

G. A. Hax of G. A. Hax & Co., of Baltimore, Md., made a combined business and pleasure trip to the west with his family after the first of the year. He visited the cities of Columbus, Ohio, Indianapolis, Ind., Chicago, Ill., Fort Wayne, Ind., and on his return attended the corn show and grain and hay dealers meeting at Lima, Ohio, on January 10.

Fred Mayer and Fred W. Jaeger of J. F. Zahm & Company, Toledo, Ohio, collaborated in "The season prompts us to express appreciation of that intangible and valuable asset 'goodwill,' a gift you have so kindly bestowed on us during the past year." Words fitly and seasonably spoken, but the two Freds can be depended upon to say the right thing at the right time to all their many friends.

W. A. Fraser Company of the Royal Insurance Building, Chicago, had an extra gift for their employes at the close of the year. In addition to the usual Christmas money, the board of directors of the company decided on a plan to allow dividends on the net earnings of the company to employes who had been with the company over one year, based on a per cent of the yearly salary and length of employment. The first dividend was arranged to be paid in January, immediately after the annual stockholders' meeting.

Bert A. Boyd of Indianapolis, Ind., had a holiday greeting for his friends in the form of a thermometer and a picture of the Indianapolis Board of Trade as the home of the Indianapolis Commission man. As the commission man's likeness also appeared on the picture it is apparent that the mercury in the thermometer could not descend very fast. However, it could be said with greater truth, no doubt, that Bert Boyd is a live one, rather than a warm one. We are willing to admit both anyway, and so, without question, do his friends.

Lamson Bros. & Co. of Chicago entertained the heads of departments of the firm, pit traders and employes at a banquet in the Gray Room of the Hotel Sherman on the evening of January 6. About 65 took their places at table at 7:30 o'clock and following an excellent dinner there were a number of good speeches made, Leslie F. Gates acting as toastmaster. The banquet was not a new feature but was given following out the company's annual custom of bringing their men together with the view of a closer relationship among the men thus securing more effective service for their customers.

A poem of three verses, author unidentified, entitled "It Can Be Done," is being sent out as a wall hanger by Frank J. Delany, grain commission merchant of 930 Postal Telegraph Building, Chicago, Ill. He says the idea in the poem is the spirit that brings results in his office. The two first verses tell of the man who tackled the thing (with a bit of a grin) that his friends said could not be done, and did it. The last verse is worth the attention of everyone and runs as follows:

There are thousands to tell you it cannot be done,
There are thousands to prophesy failure;
There are thousands to point out to you, one by one,
The dangers that wait to assail you;
But just buckle in, with a bit of a grin,
Then take off your coat and go to it;
Just start in to sing as you tackle the thing
That "cannot be done," and you'll do it.

[Special Correspondence.]

PHILADELPHIA GRAIN TRADE NEWS

BY E. R. SIEWERS.

On January 18 the regular nominations for the officers and directors of the Commercial Exchange will be publicly posted on the grain floor, and on January 28, ten days afterwards, the regular annual election is held. From present indications the successful ticket will be: President, Antonio Sans; Vice-President, William M. Richardson; Treasurer, Joseph W. Beatty, with Secretary Frank Evans Marshall, Stenographer Lorenzo J. Riley and Chief Clerk Henry E. Tumelty booked for re-appointment by the new Board of Directors. Louis G. Graff, having served two terms very satisfactorily as vice-president, will probably retire and await higher honors. The six holdover directors are: George M. Richardson, C. Herbert Bell, Samuel L. McKnight, John J. Buckley, Emanuel H. Price and Barnabas Devitt, and the six whose terms are about to expire are William M. Richardson, Winfield S. Woodward, Walter K. Woolman, Jacob B. Pultz, Samuel J. Clevenger and G. Percy Lemont, a number of whom will more than likely be re-nominated and re-elected.

The continued hot air vaporings of some of the regulation penny-a-liners here, intimating that the Commercial Exchange is split into irreconcilable factions, is to a great extent a myth, pure and simple, and the intimation continually harped upon, that there is a bitter and irrepressible conflict between prominent trade interests and the transportation companies has scarcely any foundation outside of occasional slight differences of opinion which are very apt to prevail in associations of large membership.

Let it be distinctly understood that there never was a period in the history of the Commercial Exchange when the great railroad companies with terminals in this city were in a more satisfactory relationship with the trade than at present. The Pennsylvania Railroad authorities have cheerfully granted every concession asked by the Exchange in relation to the construction of the big million dollar modern grain elevator at Girard Point, and have agreed to all of the suggestions made by the Grain Committee and the Inspection Department. The working together in future of the great commercial and transportation interests will add much to increase the general grain business, both foreign and domestic, at this port. The Philadelphia and Reading Railway officials have just recently made costly and extensive improvement at the Port Richmond Elevator to give this city greater and more effective facilities looking toward the prompt handling and treating all manner of grain.

Mr. Richardson represents the younger active progressive element of the Commercial Exchange in all things, simply this and nothing more, and a large portion of the membership feel grateful to him and his confreres, Messrs. Sans, McKnight and others, who effected an honorable settlement with the Liverpool authorities after a long and disastrous corn embargo period, which in the end served to place the standard of grain inspections here in a stronger position than ever, and restored the reputation of the Exchange to its former high ideal in foreign lands.

The records of the past year show the pilots at this port brought in 1,507 vessels, as compared with 1,434 during 1911, and took out 1,492, against 1,403 the year previous. And as to the summary and comparisons of receipts and exports of grain, while corn shipments abroad fell off unavoidably on account of the action of the Liverpool Corn Trade Association in cutting out this port for a number of months, yet there was an increase in which receipts for 1912, amounting to 5,854,559 bushels over those of the previous year, with an export gain of 6,256,753 bushels, and though for a number of years not a bushel of oats went abroad, there was shipped during 1912, 1,426,593 bushels, a clean and total increase over 1911. In addition to this large cargoes of flaxseed and barley have gone to European points and within ten days all previous records have been broken in the quick loading of export grain.

And now, since the municipality, the state, and the national government, as well as all of the commercial interests here have joined hands for one common purpose to place Philadelphia, its harbors and rivers and its traffic equipments and advantages in the lead of the increasing business possession, the New Year dawns upon trade lines in the most auspicious manner. Among the sadness and regretful changes during the closing months of the year, were the passing away from the active scenes of busy trade life of three of the most useful and worthy presidents of the Commercial Exchange, all ranging in ages from near to above the allotted time laid down by the Psalmist—E. L. Rogers, Samuel C. Woolman and James B. Canby, comprising a combined official term of eight long years at the head of their prosperous organization—and may the mantles of their good works fall upon the shoulders of those coming to take their honored places.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of December, 1912, and for the entire year:

BALTIMORE.—Reported by Jas. B. Hessong, Secretary of the Chamber of Commerce. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu.....	12,488,385	11,088,586	9,716,887
Corn, bu.....	13,197,593	14,482,742	10,275,679
Oats, bu.....	17,481,271	3,170,477	13,988,723
Barley, bu.....	197,967	30,487	
Rye, bu.....	579,588	666,258	
Tim. seed, bu.	48,643	28,707	4,687
Clover seed, bu.	17,765	13,021	1,307
Hay, tons.....	63,078	70,326	11,713
Flour, bbls.....	1,916,021	2,276,047	853,417

BALTIMORE.—Reported by Jas. B. Hessong, Secretary of the Chamber of Commerce. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	2,758,832	559,918	2,292,107
Corn, bu.....	2,359,738	2,503,063	1,289,514
Oats, bu.....	1,274,645	118,765	2,891,922
Barley, bu.....	124,672	3,226	
Rye, bu.....	135,319	56,944	
Tim. seed, bu.	4,908	680	672
Clover seed, bu.	4,613		1,214
Hay, tons.....	5,840	5,295	962
Flour, bbls....	272,421	184,177	190,371

No members elected and no transfers.

BOSTON.—Reported by James A. McKibben, Secretary of the Chamber of Commerce. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Flour, bbls....	207,490	173,853	110,232
Wheat, bu....	2,117,840	1,309,597	1,806,318
Corn, bu.....	147,961	648,514	31,822
Oats, bu.....	548,116	386,487	213,304
Rye, bu.....	29,130	4,185	43,427
Barley, bu.....	281,772	14,451	103,902
Flaxseed, bu..	72,604		47,240
Peas, bu.....	21,462	7,750	
Millfeed, tons.	1,280	1,857	108
Corn meal, bbls.	4,005	2,665	1,460
Oat meal, cases	16,205	24,047	3,231
Oat meal, sacks	22,945	51,063	29,823
Hay, tons.....	13,500	15,700	1,082

BOSTON.—Reported by James A. McKibben, Secretary of the Chamber of Commerce. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Flour, bbls....	2,010,797	1,852,145	655,702
Wheat, bu....	14,503,014	9,205,777	14,418,620
Corn, bu.....	2,039,932	6,665,785	1,763,921
Oats, bu.....	5,485,851	4,420,539	1,135,367
Rye, bu.....	77,414	40,605	43,427
Barley, bu.....	422,846	47,564	186,041
Flaxseed, bu..	104,465		78,986
Peas, bu.....	87,567	46,928	1,800
Millfeed, tons.	12,218	11,252	1,265
Corn meal, bbls.	49,182	35,770	22,501
Oat meal, cases	216,218	181,738	126,577
Oat meal, sacks	206,962	221,210	184,991
Hay, tons.....	144,060	172,180	18,708

CHICAGO.—Reported by J. C. F. Merrill, Secretary of the Board of Trade. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	1,657,000	1,086,100	1,965,000
Corn, bu.....	13,287,000	8,925,250	5,563,000
Oats, bu.....	980,500	6,256,300	8,403,000
Barley, bu.....	3,714,000	2,280,300	744,000
Rye, bu.....	257,000	179,500	110,000
Tim. seed, lbs.	2,182,000	1,120,300	2,224,000
Clover seed, lbs.	295,000	94,700	372,000
Other grass seed, lbs.	1,021,000	987,800	2,411,000
Flaxseed, bu..	652,000	144,400	4,000
Broomcorn, lbs.	6,195,000	612,900	1,184,000
Hay, tons.....	28,550	33,049	1,986
Flour, bbls....	801,000	534,882	460,000

CHICAGO.—Reported by J. C. F. Merrill, Secretary of the Board of Trade. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	35,914,000	37,118,100	35,726,100
Corn, bu.....	112,690,000	108,550,500	73,739,100
Oats, bu.....	118,491,300	94,099,800	102,077,000
Barley, bu.....	20,355,200	23,342,100	3,504,000
Rye, bu.....	2,798,500	1,790,200	1,167,000
Tim. seed, lbs.	24,970,000	22,752,100	25,091,100
Clover seed, lbs.	4,593,100	3,831,400	3,869,500
Other grass seed, lbs.	14,556,900	11,060,600	30,552,900
Flaxseed, bu..	2,298,500	959,500	409,100
Broomcorn, lbs.	16,660,900	13,758,700	7,799,400
Hay, tons.....	342,617	283,979	52,598
Flour, bbls....	7,070,898	5,859,396	6,268,876

CINCINNATI.—Reported by W. C. Culkins, Supt. of the Chamber of Commerce. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	190,908	138,452	195,655
Corn, bu.....	942,023	951,364	518,828
Oats, bu.....	738,830	377,470	621,302
Barley, bu.....	121,914	76,186	5,000
Rye, bu.....	55,119	79,926	62,621
Tim. seed, 100-lb. bags.	1,412	1,778	6,197
Clover seed, 100-lb. bags.	2,412	621	1,902
Other grass s'd, 100-lb. bags.	40,552	19,670	16,415
Flaxseed, 100-lb. bags.	84	27	99
Broomcorn, lbs.	844,949	205	36,951
Hay, tons.....	18,952	13,008	12,564
Flour, bbls....	164,957	112,261	162,295

CINCINNATI.—Reported by W. C. Culkins, Supt. of the Chamber of Commerce. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	3,235,605	3,946,681	2,446,283
Corn, bu.....	9,806,063	9,367,710	5,630,792
Oats, bu.....	7,621,681	7,329,426	4,663,938
Barley, bu.....	495,981	490,354	22,518
Rye, bu.....	588,898	727,437	307,113
Tim. seed, 100-lb. bags.	52,954	38,308	33,448
Clover seed, 100-lb. bags.	36,594	37,396	28,943

Other grass s'd, 100-lb. bags. 193,030 124,439 135,573 91,706

Flaxseed, 100-lb. bags..... 196 1,003 371 283
Broomcorn, lbs. 2,278,615 1,235,940 583,076 159,237
Hay, tons..... 151,238 155,195 91,430 97,348
Flour, bbls.... 1,437,227 1,472,930 1,016,951 873,812

DETROIT.—Reported by M. S. Donovan, Secretary of the Board of Trade. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	223,000	284,080	75,000
Corn, bu.....	437,800	535,000	240,000
Oats, bu.....	300,050	231,300	16,000
Barley, bu.....	73,000	53,200	
Rye, bu.....	7,000	11,700	
Flour, bbls....	23,600	30,550	31,400

DETROIT.—Reported by M. S. Donovan, Secretary of the Board of Trade. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	1,715,000	2,864,000	372,900
Corn, bu.....	2,775,000	4,103,000	1,862,000
Oats, bu.....	3,497,000	3,182,000	596,000
Barley, bu.....	196,000	531,000	3,700
Rye, bu.....	166,100	254,000	73,460
Flour, bbls....	287,900	281,000	326,500

DULUTH.—Reported by Chas. F. Macdonald, Secretary of the Board of Trade. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	9,914,579	2,461,286	6,918,349
Corn, bu.....		4,243	
Oats, bu.....	414,464	897,539	273,049
Barley, bu.....	1,259,535	209,269	1,423,075
Rye, bu.....	131,753	31,352	72,361
Flaxseed, bu..	3,608,915	1,297,159	3,770,057
Flour, bbls....	9,600	98,335	83,980
Flour produc'n	60,115	63,330	

DULUTH.—Reported by Chas. F. Macdonald, Secretary of the Board of Trade. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	86,777,990	34,846,509	83,829,446
Corn, bu.....	7,936	1,639,258	12,179
Oats, bu.....	10,328,940	4,647,728	11,006,038
Barley, bu.....	10,932,261	6,430,883	10,449,059
Rye, bu.....	1,904,573	704,346	1,845,784
Flaxseed, bu..	15,605,893	6,002,237	14,592,287
Flour, bbls....	5,382,150	4,235,970	6,366,610
Flour produc'n	996,635	730,845	

GALVESTON.—Reported by John H. Upschulte, Chief Inspector Cotton Exchange and Board of Trade. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	1,232,000	113,000	1,511,600
Corn, bu.....	103,000	11,000	42,857
Rye, bu.....	16,000		
Flour, bbls....	32,000	22,000	

GALVESTON.—Reported by John H. Upschulte, Chief Inspector of the Cotton Exchange and Board of Trade. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	8,566,000	7,915,703	63,965
Corn, bu.....	431,000	130,654	337,088
Oats, bu.....	204,000		
Rye, bu.....	66,000		
Flour, bbls....	365,000	315,000	

KANSAS CITY, MO.—Reported by E. D. Bigelow, Secretary of the Board of Trade. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	2,566,800	819,600	2,458,800
Corn, bu.....	1,538,750	2,202,000	713,750
Oats, bu.....	411,400	510,000	380,800
Barley, bu.....	40,600	30,800	29,400
Rye, bu.....	27,500	2,200	11,000
Kaffir corn, bu.	644,600	398,200	323,000
Flaxseed, bu..		2,000	1,000
Bran, tons.....	1,360	680	2,600
Hay, tons.....	34,536	33,096	8,136
Flour, bbls....	26,000	16,000	156,000

KANSAS CITY, MO.—Reported by E. D. Bigelow, Secretary of the Board of Trade. Figures for year 1912:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	43,719,600	25,701,600	30,665,400
Corn, bu.....	19,522,500	16,934,400	13,637,950
Oats, bu.....	6,682,700	6,230,500	5,297,200
Barley, bu.....	186,200	392,000	111,600
Rye, bu.....	147,400	84,700	80,300
Kaffir corn, bu.	2,733,500	1,346,428	1,769,426
Flaxseed, bu..	19,000	16,000	23,000
Bran, tons.....	15,800	11,080	49,760
Hay, tons.....	364,464	278,868	67,392
Flour, bbls....	298,750	157,000	1,827,250

MILWAUKEE.—Reported by H. A. Plumb, Secretary of the Chamber of Commerce. Figures for December:

Receipts		Shipments	
1912.	1911.	1912.	1911.
Articles.			
Wheat, bu....	519,800	509,630	315,128
Corn, bu.....	2,064,700	1,270,120	675,752
Oats, bu.....	1,470,600	1,042,100	884,487
Barley, bu.....	2,298,400	1,204,200	637,939
Rye, bu.....	338,800	232,560	311,484
Tim. seed, lbs.	600,000	411,035	420,000
Clover seed, lbs.	612,885	306,830	705,050
Flaxseed, bu..	121,200	90,000	
Hay, tons.....	7,702	4,836	444
Flour, bbls....	180,920	308,865	291,591



ELEVATOR AND GRAIN NEWS

ILLINOIS

J. M. Ennes is building an elevator at Kasbeer, Ill.

The elevator at Eastburn, Ill., has been remodeled.

The new elevator at Mendota, Ill., is practically complete.

The Armour Elevator Company of Chicago has dissolved.

The Rock Island Elevator "B" at Chicago will be dismantled.

A farmers' elevator company has been organized at London Mills, Ill.

The elevator at White Willow, near Seward, Ill., is practically finished.

R. K. Barley has finished his elevator at Danville, Ill., at a cost of \$16,000.

The Farmers' Grain Company will soon build an elevator at Dalton City, Ill.

Francis Wilson has succeeded Charles Hall in the grain business at Willey, Ill.

Compton Bros. have built a self-ventilating 20,000-bushel corn crib at Newman, Ill.

The Farmers' Elevator Company has taken over the Perrin Elevator at Ransom, Ill.

E. J. Cushing has purchased a half-interest in the Lachrite Grain Company at Assumption, Ill.

Wayne Bros., of San Jose, Ill., have reconstructed their elevator that was burned in September.

The old elevator at Emden, Ill., formerly owned by Bowels & Gumberling, has been dismantled.

Keilin Brothers & Company, of Chicago, will equip their elevator with a Hall Signaling Grain Distributor.

The Farmers' Elevator Company at Frankfort, Ill., has purchased the elevator formerly owned by C. J. Meyer.

The Farmers' Elevator Company has completed an elevator at Sheffield, Ill., which has a capacity of 8,000 bushels.

Through an agreement of the creditors, Dare & Layton have taken charge of the Paul Kuhn Elevator at Chesterville, Ill.

The Farmers' Elevator Company of Yorkville, Ill., is planning to build an elevator at Ellis (R. F. D. from Sherman), Ill.

Harry Grene has erected a 6,000-bushel corn crib near Garrett, Ill. It is equipped with an elevator dump and a gasoline engine.

R. K. Byerly has remodeled his elevator at Catlin, Ill., and new machinery has been installed at an expenditure of about \$10,000.

The Farmers' Elevator Company, of Pleasant Plains, Ill., has purchased a building which it has remodeled for storage purposes.

The Farmers' Square Deal Company is building an elevator six miles north of Morris, Ill., and Clarence White will manage the business.

Michael N. Reinhart of Knox, Ind., has purchased the elevator at Bondville, Ill., of E. W. Long, also of Knox. Frank Scott will continue as manager.

The partnership existing between D. C. Belsley and Daniel Greuter at Roanoke, Ill., has been dissolved, Mr. Greuter continuing the business alone.

Herron & Patterson have traded their elevator at Bryce (R. F. D. from Milford), Ill., to E. L. Grobe, of Fowler, Ind., and W. V. Marshall will have charge of the house.

The Gilson Grain and Lumber Company has been incorporated at Gilson, Ill., with a capital stock of \$35,000. The incorporators are A. R. Anderson, F. S. Brooks and W. R. Guyer.

The Chapman-Doake Company has been incorporated at Decatur, Ill., with a capital stock of \$15,000. The incorporators are Robert W. Chapman, Robert C. Doake and Grace Doake.

August Funfsinn will go out of the grain business at Fitchmoor, near Westfield, Ill., which he has conducted for ten years. He plans to organize a farmers' elevator company to succeed him.

The Buckley-Pursley Company has completed its new house at Farmington, Ill., on the site of the one that burned several weeks ago. The elevator is composed of five bins and has a capacity of 12,000 bushels. The machinery is operated by an electric

motor, which is located in the cupola and controlled by levers on the main floor. Ed. Davis has been engaged as buyer.

The E. W. Houghton Lumber Company has practically completed a new elevator at La Moille, Ill., and the old house has been torn down as it is said that its condition did not warrant repairs.

At a recent meeting of the stockholders of the Farmers' Elevator Company at La Hogue, Ill., it was decided to continue the business with J. E. Stanner of Crescent City, Ill., as manager.

The A. E. Montgomery Elevator Company of Moline, Ill., has about completed its new house. It measures 120x130 feet and is two stories high. It is of brick construction and represents an expenditure of \$35,000.

The Fairview Farmers' Elevator Company has been incorporated at Fairview, Ill., with a capital stock of \$8,000. The incorporators are Doan Parks, R. E. Gould, Dennis Stone, W. O. Locke, W. A. Kerr and W. H. White.

The Central Illinois Grain Company is building an elevator on 15 acres of land recently acquired at Springfield, Ill. It will be 40x44 feet in size and 112 feet high. The capacity will be 100,000 bushels and the cost will approximate \$35,000.

The Armour Grain Company of New Jersey has purchased from the Chicago, Milwaukee and St. Paul Railroad, property on the north branch of the Canal between Weed and Blackhawk streets in Chicago, containing 42,281 feet, for a stated price of \$34,305.55.

A. D. Stanford has purchased the elevator at Malta, Ill., of W. D. Blair. Mr. Stanford, who has recently made his home in Mankato, Minn., was formerly in the grain business at Bardolf and at Chatsworth, Ill., and is well acquainted among the grain trade of that section. The transfer of the property was made by J. M. McGuire, elevator broker of Chicago and Campus, Ill.

The Farmers' Elevator Company at Sandwich, Ill., received the first grain in its new elevator on December 20. The house has been complete for some weeks, but the opening was delayed, owing to a lack of electric power to operate its motors. Until the Illinois Northern Utilities Company gets its lines into shape, the elevator will be run by a gasoline engine. The building is 36x36 feet in size and 74 feet high. There are nine bins having a capacity of 35,000 bushels. Two legs have a capacity for handling 2,000 bushels per hour. A Hall Grain Distributor has been installed in connection with the other equipment.

IOWA

A new elevator has been completed at Rinard, Iowa.

The Farmers' Elevator Company is building a house at Garwin, Iowa.

The elevator that was burned at Letts, Iowa, will be rebuilt by Garrett Bros.

The new elevator at Leon, Iowa, has been opened and W. E. Lee is manager.

The Hartford Grain Company is building an elevator at Cedar Falls, Iowa.

The Home Elevator Company will erect an elevator at Webster City, Iowa.

The D. Milligan Company, of Jefferson, Iowa, is building an elevator at Dana, Iowa.

The Farmers' Co-operative Company has completed an elevator at Kinross, Iowa.

The Droge Elevator Company of Council Bluffs, Iowa, is building a 6,000-ton ice house.

Curt Tigges has sold his elevator at Vancleve, Iowa, to a Mr. Cook of Springville, Iowa.

The Kellerton Elevator Company is building a 20,000-bushel elevator at Kellerton, Iowa.

The Somers Grain Company, Somers, Iowa, has installed a Hall Signaling Grain Distributor.

The Trans-Mississippi Grain Company has sold its elevator at Mapleton, Iowa, to J. L. Bennett.

E. E. Hayes & Son, of Mt. Ayr, Iowa, will equip their elevator with a Hall Signaling Grain Distributor.

Earl Tabor has disposed of his interest in the Bucklen & Tabor Grain Company at Greene, Iowa, to Silas Maxson and son, and the business will be

conducted under the firm name of Bucklen, Maxson & Son.

The Farmers' Grain Company of Story City, Iowa, has increased its capital stock to \$25,000.

Charles Guth has purchased the elevator at Kingsley, Iowa, of which he has been the manager for several years.

The Winfield Elevator & Supply Company has been incorporated at Winfield, Iowa, with a capital stock of \$20,000.

The Stuhr-Reesy Grain Company of Minden, Iowa, a subsidiary company of the Rothschild Grain Company of Davenport, Iowa, has gone out of business.

John Dobson has purchased F. W. Howson's interest in the firm of Howson & Hedges at Mt. Vernon, Iowa, and the business will be operated as Hedges & Dobson.

F. H. Schmidt and Robert B. Pike have formed a partnership at Sioux City, Iowa, and will conduct a grain business under the firm name of Schmidt & Pike.

W. F. Bowman has secured a one-third interest in the grain business of Empey & Quisenberry at Morningside, Iowa, and the name of the firm is now the Morningside Elevator, Feed and Coal Company.

John A. TeStrake who recently purchased the Muscatine Produce and Pure Ice Company at Muscatine, Iowa, is building a \$2,000 elevator. The house will be used exclusively for corn and will measure 34x20 feet and will be 34 feet high. It will have a capacity of 3,000 bushels and will be operated by electricity.

EASTERN

Ernest Magoon has opened a grain store at Freeport, Maine.

J. W. MacLean will enter the grain, hay and grocery business at Danvers, Mass.

The M. D. Stanley Incorporated Company is building an elevator at New Britain, Conn.

M. H. Beards has succeeded W. H. Lottridge in the grain business at New Berlin, N. Y.

The Lehigh Valley Railroad Company is building an elevator at Black Tom, Jersey City, N. J.

The Ryan Elevator at Port Chester, N. Y., which was damaged by fire last summer is again in operation.

William Hoffman, proprietor of the old mill at Brinton's Bridge, West Chester, Pa., has built an elevator.

George F. Lingelfelter is constructing an elevator at Johnstown, Pa., and he has opened a flour and feed business.

The McQuesten & Lewis Company is building an elevator with a capacity of 10,000 bushels at Manchester, N. H.

C. S. Harlow, of Boston, will build an elevator at Augusta, Maine, which will be used by Stanley, Harlow & High.

F. H. Tillinghast has taken over the grain business at Central Village, Conn., recently purchased of Mrs. E. H. Kennedy.

Crouse & Lewis have been incorporated at Monroe, N. Y., with a capital stock of \$15,000, to deal in grain, feed and cement.

It is reported that John Sprenger will build a brick elevator at Cressona, Pa., in connection with his flour and feed business.

W. S. Leavitt has entered the grain business at Fryeburg, Maine, after having been out of the business for the past two years.

C. W. Brister of the Brister Milling Company, has completed the construction of a new elevator at Auburn, N. Y. It is of reinforced concrete and steel construction and cost between \$10,000 and \$15,000.

The Westville Groceries and Grain Company has been incorporated at New Haven, Conn., with a capital stock of \$2,500. The incorporators are John T. Cotter, Catherine A. Cotter and Edward L. Minor.

The F. C. Dyer Company has been incorporated at Salisbury, Vt., with a capital stock of \$20,000, to deal in grain, hay, feed, etc. The incorporators are Frank C. Dyer and Jessie E. Dyer of Salisbury;

January 15, 1913.

John E. Weeks of Middlebury, Vt., and William H. Dyer of Middletown Springs, Vt.

It is reported at Baltimore, Md., that the Western Maryland Railroad has purchased land at Port Covington and will erect an elevator.

The Imperial Elevator Company has been incorporated at Camden, N. J., with a capital stock of \$5,000, by F. R. Hansell and others.

The Stanley Wood Grain Company has been incorporated at Taunton, Mass., with a capital stock of \$10,000. The incorporators are H. Stanley Wood, Charles R. Borden, William A. Walker and George H. Schefer.

The Robert E. Page Company has been incorporated at Syracuse, N. Y., with a capital stock of \$6,000, to deal in grain, seeds, fertilizers, etc. The incorporators are R. E. Page, Susie V. Page and Eleanor Page.

S. Hutchinson & Company have been incorporated at Rochester, N. Y., with a capital stock of \$10,000, to deal in grain. The incorporators are H. S. Servis, J. H. Hutchinson and S. Hutchinson, of Pittsford, N. Y.

The Phelps Bros. Company has been incorporated at Boston, Mass., with a capital stock of \$25,000, to deal in hay and grain. The incorporators are Roland Litchfield, Charles H. Dow, Pauline H. Simons and Marion E. Pike.

The Harrison Company has been incorporated at Newark, N. J., to deal in grain and grain products. The capital stock is \$100,000 and the incorporators are J. A. Stevens and A. C. Harrison of Montclair, N. J., and J. H. Harrison of Newark.

MINNESOTA AND WISCONSIN

W. R. Sheffield will close his elevator at Erskine, Minn., for the present.

The Consolidated Elevator Company will erect a building at Superior, Wis.

Froemming & Perry have built a 15,000-bushel elevator at Maplewood, Wis.

The Interstate Grain Elevator Company has closed its house at Wadena, Minn.

Hubbard & Palmer have purchased the Geyerman Elevator at Brewster, Minn.

George Andrus has succeeded Balch & Turner in the grain business at Waterville, Minn.

The grain firm of Kraker & Wertin, Albany, Minn., has been dissolved, Mr. Wertin retiring.

J. W. Smith of Minneapolis is contemplating the erection of an elevator at Redwood Falls, Minn.

The Farmers' Elevator and Supply Company has taken over Bingham Bros. elevator at Tyler, Minn.

An electric motor of 30-horsepower has been installed in the Western Elevator at Rochester, Minn.

An addition has been built to the elevator at Emmons, Minn., and a new corn crib is under construction.

Charles Wise of Sioux City, Iowa, has sold his elevator at Windom, Minn., to the St. John Grain Company.

The S. Miller Fruit Company has rented the MacEachron Elevator and warehouse at Oconto Falls, Wis.

C. E. Richmond has disposed of his elevator interests at Lintonville, Minn., and has removed to Plainview, Minn.

The St. Anthony and Dakota Elevator at Erskine, Minn., has been reopened with Fred Millersberg of Kennedy, Minn., in charge.

The work of rebuilding the elevator of the New London Milling Company that burned recently at Asbury, Minn., will soon begin.

An elevator has been completed at Hokah, Minn., and P. R. Reilly has been engaged as buyer. The building is 24x36 feet in size with bins 36 feet deep.

The P. F. Boulay and Bro. Grain Company at Fond du Lac, Wis., has filed articles of dissolution as a corporation and will continue business as a partnership.

The Piper, Johnson & Case Grain Company of Minneapolis, Minn., has been dissolved and the business will be continued by the Johnson, Case & Hanson Company.

The La Grange Mills at Red Wing, Minn., have asked permission of the city to construct and maintain an elevator conveyor from the mill to the elevator across the street.

At a recent meeting of the board of directors of the New Ulm Farmers' Elevator Company at New Ulm, Minn., a dividend of 6 per cent was declared to all stockholders of record.

The Gates Elevator, at Rochester, Minn., formerly owned by the Rochester Grain and Realty Company, has been sold to Earl Leonard and George Leonard, who took possession about January 1.

Emil Hauterbrook is building an elevator at Green Bay, Wis. The house will be covered with galvanized iron and it is expected that operations will begin this month. The Chicago, Milwaukee &

St. Paul Railroad will probably build a spur track to the plant.

The Blue Earth Mill Company, Blue Earth, Minn., has purchased and removed the Peavey Elevator to a site in connection with the mill, giving the milling company a storage capacity of 65,000 bushels.

The Butterfield Elevator at Wheeler, Wis., said to be worth between \$3,500 and \$4,000, was sold at auction recently to satisfy a mortgage of \$1,800. A Mr. Woodward of Minneapolis bid in the property for \$700.

The new warehouse of the New Ulm Farmers' Elevator Company erected at New Ulm, Minn., is now complete and is used as a storehouse for oil meal, salt, flour and feed. The structure measures 18x36 feet, is two stories high and cost approximately \$500.

The Albert Dickinson Company of Minneapolis, Minn., plans to rebuild its seed corn elevator that burned recently on a larger scale, but Leslie Edgerton, manager of the Minneapolis branch, stated that the company will probably wait until spring for reconstruction.

MISSOURI, KANSAS AND NEBRASKA

Bartlow & Coffey will build an elevator at Tisdale, Kan., in the spring.

M. F. Winn has taken over the Anderson Grain Company at Kearney, Mo.

An elevator may be erected at Howell, Neb., by the farmers of that vicinity.

The Beaver Valley Grain Company has gone out of business at Danbury, Neb.

The farmers in the vicinity of Spencer, Neb., may organize and build an elevator.

E. L. Kent and Charles Taylor have completed a grain warehouse at Unionville, Mo.

Carl West of Wyoming, Neb., has taken over the Denton Elevator at Douglas, Neb.

The Alfalfa Milling Company of Omaha, Neb., has purchased a Hall Signaling Grain Distributor.

F. Jameson and Stephen Wilson have established a grain and stock business at Spring Hill, Kan.

W. C. Brown has installed a combination car loader and cleaner in his elevator at Beloit, Kan.

The Blaker Lumber & Grain Company, of Mound City, Kan., has placed its new elevator in operation.

W. C. Blount has sold his interest in the Sturgeon Grain Company at Belpre, Kan., to J. H. Tudor.

The Concordia Milling Company of Concordia, Kan., has installed a Hall Signaling Grain Distributor.

The T. B. Hord Grain Company, of Stromsburg, Neb., has purchased two Hall Signaling Grain Distributors.

The Russell Lumber Company, of Gorham, Kan., has equipped its elevator with a Hall Special Elevator Leg.

The Protection Grain Company, of Protection, Kan., has been succeeded by the Southwestern Grain Company.

The Pawnee County Grain & Supply Company, of Larned, Kan., will equip its elevator with a Hall Special Elevator Leg.

The Bowersock Milling Company of Lawrence, Kan., contemplates the erection of a new reinforced concrete elevator to cost \$25,000.

The Omaha Alfalfa Feed Company, Omaha, Neb., has built a 50,000-bushel elevator and a corn dryer with a capacity of 10,000 bushels.

The Rixon Tabb Grain Company has sold its elevator at Abbeyville, Kan., to the Larrabee Milling Company, of Hutchinson, Kan.

The firm of Vandervelde & De Young at Prairie View, Kan., has been dissolved and the new firm of Thomas & De Young is running the business.

R. Protheroe is planning to build an elevator at Lebo, Kan., and a spur track will probably be laid from the Santa Fe Railroad to the elevator site.

F. G. Endleton has leased the Leffert Elevator at Omaha, Neb., and will operate it. The capacity will be increased and new machinery will be installed.

W. T. Shute, of Macksville, Kan., whose new \$4,500 elevator was recently destroyed by fire at Penalosa, Kan., is planning to rebuild in the spring.

Theo. Ritter has secured an interest in the McCord Grain Company at Ainsworth, Neb., and the style of the firm name will be changed to that of McCord & Ritter.

One new town is assured and two are in prospect for the Union Pacific short line between Hastings and Gibbon, Neb. It is said that one will be called Denton and that elevators will be built at the three sites.

The Terminal Elevator on the Rock Island Railroad at Kansas City, Mo., is to be enlarged by the addition of storage room for 1,000,000 bushels of grain. Work will soon begin and the new tanks will be ready for use by the end of next June. The

elevator is operated by the Rosenbaum Grain Company of Kansas City and Chicago.

The Valley Grain and Elevator Company has been incorporated at Caruthersville, Mo., with a capital stock of \$25,000. The incorporators are H. C. Lewis, H. C. Schult, J. S. Wahl and others.

J. D. Tyler of Lincoln, Colo., has purchased C. C. Hunter's interest in the grain firm of Hunter Bros. at Chanute, Kan., and H. D. Hunter and Mr. Tyler will continue the business under the style of Hunter & Tyler.

S. W. Jackson, of Cuba, Kan., has sold his interest in the Belleville Mill & Elevator Company, Belleville, Kan., to A. W. Hoag, whose son, Miles Hoag, will assist in the business. The company is planning extensive improvements, it is said.

It is reported that C. W. Lonsdale of the Lonsdale Grain Company, Kansas City, Mo., has leased or the Chicago Great Western Railroad a 1,000,000-bushel elevator at Kansas City, Kan., and that he will build additional storage room for 500,000 bushels.

Hampton Bros., of Lafontaine, Kan., who recently took over the elevator of the Fredonia Grain Company at Fredonia, Kan., have remodeled the house and an addition, 30x40 feet in size, has been built and feed grinding equipment has been installed.

Chairman C. L. Davidson and Commissioner Ralph Faxon of the Wichita Business Association, Wichita, Kan., have been holding conferences with grain men of the city relative to the building of a 1,000,000-bushel elevator at a cost of approximately \$200,000.

The stockholders in the Co-operative Grain and Live Stock Association at Kearney, Neb., voted to give up their elevator business and to lease the house until next July, owing, it is said, to the shortage in the corn crop in that vicinity. It is reported that E. D. Gould of the Gould Cattle Company will lease the building.

C. R. Rixon of Hutchinson, Kan., and Henry Wacker of Greensburg, Kan., have formed the Rixon Grain Company and have purchased C. W. Tabb's interest in the Tabb Grain Company, taking over the elevators at Wilmore, Greensburg, Joy, Wellsford and St. John, Kan. Operating headquarters will be maintained at Greensburg.

SOUTHERN AND SOUTHWESTERN.

The plant of the Granite Grain Company at Granite, Okla., is closed.

L. Dillon has engaged in the grain, hay and feed business at Asherton, Texas.

John R. Scott has succeeded G. P. Albright in the grain business at Childress, Texas.

Dr. B. B. Barnett & Sons have engaged in the grain and flour business at Camden, Tenn.

The Hanna-Mansfield Grain Company has succeeded the Cox & Hanna Grain Company at Lambert, Okla.

The directors of the Farmers' Union Warehouse at Lockhardt, Texas, are planning to enlarge their present facilities.

The Knowles Grain Company, recently incorporated at Knowles, Okla., has awarded the contract for the erection of an elevator.

The Farmers' Elevator Company of Pocasset, Okla., has purchased an elevator from the Yukon Milling Company at a cost of \$5,000.

The C. W. Bickel Company has been incorporated at Louisville, Ky., with a capital stock of \$10,000, to deal in grain, provisions and bonds.

H. J. Flanders, Jr., formerly connected with A. Brandeis & Son, has engaged in the grain business at Louisville, Ky., on his own account.

The Farmers' Union Supply Company of Wichita Falls, Texas, is building an additional storage room in the way of a building 64x100 feet in size.

The Belhaven Grain & Commission Company has been incorporated at Belhaven, N. C., with a capital stock of \$10,000, by C. C. Smith and others.

A. G. Crawford of Little Rock, Ark., has purchased an interest in the Valley Grain and Seed Company at Mercedes, Texas, and has assumed active management.

M. R. Mansfield has purchased an elevator at Cherokee, Okla., and will operate under the name of the Hanna-Mansfield Grain Company, with headquarters at Lambert, Okla.

Work on the erection of a \$75,000 elevator at Chattanooga, Tenn., by the Mountain City Mills, has begun. The contract was awarded the Witherspoon-Englar Company, of Chicago. The house will have a capacity of 250,000 bushels.

F. M. Dowling & Co. have incorporated at Jacksonville, Fla., with a capital stock of \$100,000, to engage in the wholesale grain, hay and grocery business. The greater part of the stock, 998 shares, is held by the president, F. W. Dowling, who is also general manager, the other officials being C. D.

Moore, secretary, and William H. Dowling, treasurer, all of whom constitute the board of directors.

The Unionville Milling and Elevator Company has been organized at Unionville, Tenn., to take over the milling and elevator plant at that place.

The William Cosby Flour & Grain Company has been incorporated at Birmingham, Ala., with a capital stock of \$200,000. The officers are: W. M. Cosby, president; J. C. Hodges, vice-president, and S. S. Godbee, secretary and treasurer.

The Miller Grain & Commission Company has been incorporated at Birmingham, Ala., with a capital stock of \$25,000. W. L. Miller is president and general manager and L. J. Smith is secretary.

An addition will be constructed to the elevator of the Weathers Grain and Elevator Company at Greenville, Texas, it is said. The plant now has a capacity of 8,000 bushels of corn and is operated by an electric motor.

THE DAKOTAS

Two elevators have been opened at Fillmore, N. D. E. A. Brown has erected an elevator at Bemis, S. D.

The Farmers' Elevator at Dawson, N. D., has been opened for business.

C. W. McGray has taken over the Independent Elevator at Underwood, N. D.

Lawless & Lawless have taken over F. M. Slagle's elevator at Beresford, S. D.

The Dakota Grain Company has taken over the Occident Elevator at Deisem, N. D.

The A. A. Truax Grain Company has purchased C. Fredericks' elevator at Missionhill, S. D.

Gaskill Bros. & Torrence have completed their new 25,000-bushel elevator at Colome, S. D.

The Jones Bros. Grain Company has disposed of an elevator at Norden, S. D., to J. M. Stoddard.

The Farmers' Grain and Lumber Company has taken over the lumber yard at Strandburg, S. D.

The Farmers' Elevator Company has been organized at Derrick, N. D., with a capital stock of \$10,000.

The Minneapolis and Northern Elevator Company has sold its house at Cummings, N. D., to the Farmers' Elevator Company.

The Farmers' Elevator Company has rebuilt the elevator that was destroyed by fire at Chama (R. F. D. from Beach), N. D.

The Victoria Elevator Company has completed the construction of an elevator at Wellsburg (R. F. D. from Harvey), N. D.

The Empire Elevator Company has rented the Independent Elevator at Wilmot, S. D., and William Burdine, Jr., has been engaged as buyer.

The North Dakota Grain Company is building an elevator at Sydney (R. F. D. from Casselton), N. D., and the Guarantee Elevator Company will construct a house there in the spring.

The Lisek Grain Company has succeeded the Minneapolis and Northern Elevator Company at Conway, N. D., and the elevator of the Northland Elevator Company has been moved away.

OHIO, INDIANA AND MICHIGAN

The Bailey-Mitzner Company has succeeded Ed. Mitzner & Co. at Wanatah, Ind.

John D. Reed will build an elevator at Lawton (R. F. D. from Winamac), Ind.

C. Johnson, formerly of Morrice, Mich., has purchased an elevator at Iona, Mich.

The Farmers' Grain and Coal Company has erected an elevator at Whitesville, Ind.

W. H. Newson has purchased the elevator at Elizabethtown, Ind., of A. R. Anderson for \$6,000.

Two new steel corn cribs have been erected on the farm of the Ohio State University at Columbus, Ohio.

The Loveland & Hinyan Company has succeeded the Glen R. Loveland Company at Grand Rapids, Mich.

The Farmers' Grain Company has been incorporated at Sandusky, Mich., with a capital stock of \$25,000.

The Stockwell Grain Company of Stockwell, Ind., has been succeeded by the Lauramie Grain Company.

G. P. Teegardin has purchased the elevator at Ashville, Ohio, which he sold to John H. Sark about a year ago.

G. W. Richards & Son have taken over the elevator and coal business at New Paris, Ohio, from J. E. Richards.

Brokamp & Cavanaugh have incorporated at Cincinnati, Ohio, with a capital stock of \$10,000, to deal in hay, grain, etc.

The Lake Shore Railroad will extend a spur track to the Lipe Elevator at Bryan, Ohio. The new

switch will be a double track and an extension of the present side track to the house.

J. L. Donley of the firm of Palmer & Donley, has disposed of his interest in the elevator business at Ashland, Ohio, to J. C. Palmer.

John D. Winters of Bucyrus, Ohio, has purchased an interest in J. M. Smith's elevator at Mansfield, Ohio, and has taken active charge.

Sims & Ashpaugh, of Royal Center, Ind., have purchased three Hall Signaling Distributors for small grain and one ear corn distributor.

The Peoples' Supply Company has been incorporated at Iron River, Mich., with a capital stock of \$10,000, to deal in grain, flour, feed, hay, etc.

Robbers entered the house of the Oakharbor Grain and Hay Company at Oakharbor, Ohio, on December 16 and blew the safe, securing about \$112.

McDonald & Co. of New Albany, Ind., have erected a new brick dryer, boiler and engine house which will be equipped to dry and cool grain at the rate of eight carloads daily.

John Wren of Deunquat, Ohio, has sold his elevator to Charles Welch of Crawford County. Marguerat Bros. of Sycamore, Ohio, have a lease on the house which expires March 1.

Joseph Hermiller has sold his elevator at Ottawa, Ohio, to L. H. Douglas. Mr. Hermiller has been engaged in the elevator for 33 years, having been the owner for the past 29 years.

WESTERN

The Mesa Flour Mill Company is building an elevator at Meeker, Colo.

S. E. Dorey is promoting the erection of an elevator at Hayden, Colo.

The Russell-Miller Company has completed an elevator at Acton, Mont.

C. W. Bethel of Harrington, Wash., has leased his warehouse for two years.

The Burley Milling & Elevator Company has constructed an elevator at Hailey, Idaho.

The Swink Milling and Grain Company at Rocky Ford, Colo., has gone out of business.

Messrs. O'Grady and Marony are contemplating the building of an elevator and mill at Great Falls, Mont.

The Grain Dealers' Association has been incorporated at Tacoma, Wash., with a capital stock of \$100,000.

It is reported that the farmers in the vicinity of Klamath Falls, Ore., will erect several elevators in the spring.

The Tulare Grain & Milling Company of Tulare, Cal., is expending about \$3,000 in the way of improvements.

The Hartline Mill and Elevator Company, Hartline, Wash., is contemplating the erection of a large warehouse.

D. O. Herrick, formerly connected with the Overland Cereals Company, has embarked in the grain business at Laramie, Wyo.

It is reported that several elevators will be built in Coulee City, Wash., in the near future by the farmers and business men.

CANADIAN

A new elevator has been constructed at Mirror, Alta.

A farmers' elevator has been erected at Gerald, Sask.

The Farmers' Elevator Company is building a house at Elbow, Sask.

The Alberta Pacific Elevator Company has completed a house at Three Hills, Alta.

N. M. Patterson & Company have completed their new cleaning elevator at Fort William, Ont.

The Massey-Harris Company, Ltd., of Toronto, Ont., will erect a warehouse at Edmonton, Alta.

D. Horn & Co. have overhauled their elevator at Port Arthur, Ont., for the treatment of wet and damaged grain.

The Farmers' Elevator Company has awarded the contract for the erection of a 30,000-bushel elevator at Munson, Alta.

The Spokane Grain Company, of Spokane, Wash., has been registered in British Columbia as an extra-provincial company.

The Dominion Government may build two elevators on Burrard Inlet, the main harbor of Vancouver, B. C., next year.

Parrish & Heimbecker, of Winnipeg, have completed the Superior Elevator at Fort William, Ont. It has a capacity of 150,000 bushels.

The Grain Growers' British Columbia Agency, Ltd., will install a Hall Signaling Grain Distributor in its elevator at New Westminster, B. C.

A cleaning elevator with a capacity of 1,000,000 bushels is under construction at Fort William, Ont., located between the Consolidated and Western Elevators.

[Special Correspondence.]

GRAIN TRADE NOTES FROM TOLEDO

By E. F. BAKER.

For several days past a sheet of ice has covered the ground throughout this section and there is considerable speculation as to whether the young growing crops have been injured or not. The wheat crop has been unusually satisfactory until the storm struck this section several days ago, a driving rain freezing as it fell and covering trees, shrubbery, grass and growing plants with a complete coating of ice which failed to thaw in more than two days. There has been little change in the market during the past month with the exception of hay which is moving more freely. The stringency of freight cars which restricted the movement during November is no longer so noticeable. Should the present bad weather continue, traffic congestion may be looked for, but thus far conditions have not been affected particularly. Hay is quoted on the local market as follows: No. 1 timothy, \$14.50 to \$15.50; No. 2 timothy, \$13.50 to \$14.00; light clover mixed, \$13.50 to \$14.00; No. 2 clover mixed, \$13.50.

F. O. Paddock, president of the Paddock-Hodge Co., was elected president of the Toledo Produce Exchange at a recent meeting. The other officers elected were: Vice-president, C. S. Coup; second vice-president, John A. Smith; treasurer, Wallace Applegate; secretary, A. Gassaway; directors, Frank I. King, David Anderson, Fred Mayer, F. R. Mooreman, W. DeVore, E. L. Southworth, E. L. Camp, W. E. Thompkins, H. D. Raddatz and Frank Annin.

E. L. Southworth is attending the week-end corn show at Lima, O., this week.

Authority has been received from Washington by the local postoffice authorities to take mail directly from the central station to meet the Wabash train leaving at 3 p. m. This action has been received with great satisfaction by the grain men who are greatly benefitted by the change.

Word has been received of the death of John Damp at Milwaukee recently, of the infirmities of age. Mr. Damp was formerly proprietor of the Bacon mill at Tiffin, O., and well known to grain men in this section. He leaves a son and daughter.

Simeon Royce, a well known grain man of Fremont, O., passed into the great beyond recently, at his home in that city at the age of 74 years, death resulting from rheumatism. He is survived by six children and four sisters. When a boy Mr. Royce moved to Fostoria, Ohio, where he learned his trade of miller. In 1862 he, with the Koons brothers, started the mill of Royce & Koons Bros., now known as the Tucker mill at Ballville, O. The mill was burned two years later and the firm became Royce & Shell. Later Mr. Royce took charge of the June and French mill which he conducted until forced to retire on account of ill health.

The Hicks-Brown Milling Co., of Mansfield, O., which has an indebtedness of nearly \$100,000 has gone into the hands of a receiver, J. B. Lindley having been appointed to that position by the court.

N. J. Patton, of Bellecenter, O., harvested enough Alsike clover seed for himself and several neighbors from 20 acres of land. What was left he sold to the elevator man for \$1,038.26.

E. A. Spurrier, a Marysville flour merchant, was seriously injured recently by falling from a flour sifter to the floor.

W. A. Dull, owner of the Willshire Milling Co., of Willshire, O., was a recent caller at the Produce Exchange. Mr. Dull says that a superior quality of corn is reaching the market and is much better than last year. He claims that farmers will not sell at present prices.

Charles W. Schug, formerly with the grain firm of Monroeville, O., has purchased a hardware store at Bellevue.

Homer Bickbart, a 20-year-old youth, was whirled about the shaft in his father's flour mill at Paulding, O., some time ago for five minutes at the rate of 50 revolutions a minute. The boy, whose presence of mind in clinging to the shaft after his clothes had been caught in a set screw, saved him from a fearful death, screamed. His mother in her home nearby, heard his screams and notified the father who stopped the machinery just as the boy, exhausted, was ready to drop to the floor.

J. W. Young, of the Toledo Grain & Milling Co., and Mark Mannel, of the Harter Milling Co., appeared before the Interstate Commerce Commission, representing Toledo grain dealers in the transit hearing in December.

The flour and feed store of Miller & Diehl, Cherry street, Toledo, was entered by cracksmen recently, who blew open the safe with nitro-glycerin. About \$2 in money and a gold watch were all that the thieves secured for their pains.

Milo Bashare, pioneer grain merchant of Toledo, died recently at his home in Toledo at the age of 77 years. Congestion of the lungs was the immediate cause of his death. He engaged in the grain business with J. H. Detwiler in 1860 under the firm name of Detwiler & Bashare. A wife survives him.

ASSOCIATIONS

The Farmers' Grain Dealers' Association of Illinois will hold its annual meeting at Jacksonville, February 18 to 21.

The South Dakota Grain Dealers' Association will hold its annual convention at Watertown, January 22 to 24, and a large attendance is anticipated.

The sixteenth annual meeting of the Kansas Grain Dealers' Association will be held in Kansas City, Mo., on February 11, 12 and 13. Headquarters will be at the Coates House and an interesting program has been prepared.

The annual meeting of the Farmers' Grain Dealers' Association of Minnesota will be held in Minneapolis, January 28 to 30. Over a thousand delegates are expected and an interesting program has been arranged. The convention will be held in the assembly hall of the court house.

The twelfth annual convention of the Tri-State Grain and Stock Growers' Association will take place in Fargo, N. D., January 14 to 17. About three thousand delegates from the two Dakotas and Minnesota will attend the meeting. All sessions will be held in the Grand Theater and a large hall has been provided for overflow meetings.

A petition for an organization of traveling grain solicitors has been circulated by a representative committee, and a meeting for permanently establishing this body will be held at Minneapolis in the Directors' Room of the Chamber of Commerce on Tuesday, January 28, at 3 p. m. Those who are most active in the formation of the association state that it will be the purpose of the new organization to work with the grain trade on all subjects, and that it will conserve the best interests of the employers. Until organization has been effected all communications relative to it should be sent to J. H. Adams, 324 Flour Exchange Building, Minneapolis, Minn.

Secretary Strong of the Illinois Grain Dealers' Association has issued a bulletin giving names of new members and changes in the Twentieth Annual Directory since that book went to press. Membership has been granted to Chapman Brothers, La Place and Casner, Ill., and changes have been made as follows: T. F. Grady succeeds F. R. Ludwig, Watkins (Champaign p. o.); Meyers & Shank succeed the Pearl City Grain Company, Pearl City; Ed. Conlin succeeds Conlin Brothers, DeKalb; Bolivia Farmers Grain Company succeeds M. M. Spengler & Company, Bolivia; Hildebrande Brothers, new firm at Emden; F. R. Ludwig succeeds Ludwig & Grady, Staleys (Champaign p. o.); A. B. Means succeeds W. C. Tuttle, Holden (Bloomington p. o.); F. E. Webber succeeds A. H. Webber & Son, Padua; W. S. Russell, elevator rebuilt, Allentown (Vandalia R. R. between Morton and Mackinaw).

Grain elevator men at an informal meeting held recently in Fort William decided to form a grain shippers' association for the protection of their interests, which, it is claimed, have been seriously injured by the strike of the Canadian Pacific Railway clerks. According to reports a deficit of 75 per cent. on the net earnings of the elevators of Fort William has been caused by the strike. It is stated that neither manifests nor expense bills have been made out or sent to the grain houses since the strike, and that the grain dealers of Fort William owe the Canadian Pacific Railway approximately \$1,000,000 in freight charges since the beginning of the strike. When these bills are finally sent in the grain men will have no method of checking up, since no manifests have been received. The government report of grain shipments shows that the railway company has not yet entered any grain in their stock ledgers since the commencement of the strike.

MEETING OF IOWA GRAIN SHIPPERS.

A mass meeting of grain shippers has been called to be held at the Wahkorso Hotel, Fort Dodge, Iowa, January 16. The principal matter for discussion will be the shortage of cars existing since the first of December. In order to obtain a clear understanding of the situation to present to the meeting, Secretary George A. Wells of the Western Grain Dealers' Association has sent out printed blanks to shippers having a number of questions to be filled out and returned to him. In addition he forwarded a copy of some correspondence with the Interstate Commerce Commission relative to the question of car shortage.

An invitation has been extended to the different railroad companies and the Iowa State Railroad

Commission to send representatives to attend the meeting and participate in the discussion of the car shortage situation. Besides talking over car shortage, the meeting will also decide what bills in the interests of grain shippers shall be presented to the Legislature that convenes January 13, and also to discuss some bills which are now before Congress. A legislative committee will probably be appointed at the meeting.

ILLINOIS GRAIN DEALERS' COMMITTEES HOLD JOINT MEETING

A joint meeting of committees from the Illinois Grain Dealers' Association and the Farmers' Grain Dealers' Association was held at the St. Nicholas Hotel, Springfield, Ill., on Thursday, December 19, to prepare a reciprocal demurrage bill to be presented before the General Assembly in January. Thomas Sudduth, Springfield, was elected chairman, and John A. McCreery, Mason City, secretary of the joint meeting.

Others present were: Lee G. Metcalf, president Illinois Grain Dealers' Association, Illiopolis; Fred Walbaum, president Farmers' Grain Dealers' Association, Ashland; H. W. Danforth, Washington; C. M. Woods, Springfield; W. T. Cornelison, Peoria; W. L. Shellabarger, Decatur; E. R. Ulrich, Springfield; S. W. Strong, secretary Illinois Grain Dealers' Association, Urbana; J. U. Surface, Mason City; C. J. Baer, Monticello.

The subject of car service and car shortage was discussed for two hours and a tentative bill was prepared which a sub-committee was directed to submit to William R. Bach, Bloomington, attorney for the Illinois Grain Dealers' Association, to be put in proper legal shape. The sub-committee was instructed to report the bill, when it is ready, to the General Assembly at a date to be determined later.

MEETING OF MICHIGAN HAY AND GRAIN DEALERS' ASSOCIATION.

The Michigan Hay and Grain Dealers' Association, organized last August to succeed the old Michigan Hay Association, held a meeting at Detroit, Mich., January 7. It was presided over by President Chas. Wolohan of Birch Run and the larger part of the discussions were over the poor quality of hay and the market conditions of that commodity, which left little chance of profit to the handlers of same.

Former State Senator Arthur C. Holmes made an interesting address on the subject of Reciprocal Demurrage.

Hon. Willis L. Moore, chief of the United States Weather Bureau, was endorsed by the association for the office of Secretary of Agriculture, and a motion was adopted that they pledge him their support.

A local subject was pretty generally discussed being the proposed alleged excessive demurrage charge of \$5 a day after 48 hours free time by the railroads in the Detroit market.

Some of the speakers who gave their opinion on the hay situation were H. G. Morgan of Pittsburgh, Pa.; H. L. Goemann of Toledo, Ohio; A. W. Cutler, of Adrian; F. M. Houghton, of Ohio; M. G. Ewer, secretary of the association, at Detroit; M. A. Bunting, Jackson.

INDIANA GRAIN DEALERS TO MEET IN INDIANAPOLIS

The annual meeting of the Indiana State Grain Dealers' Association will be held at Indianapolis on January 21. In the morning the organization will meet singly and in the afternoon a joint session will take place with the Indiana Millers' Association. The meeting will be carried over until the following day on account of the Prize Grain Contest held by the Indianapolis Board of Trade, the awards of which will be made on January 22. This contest promises to be very interesting on account of its rather broad scope and large field of entries. There are five different classes including best ten ears of white corn, best ten ears of yellow corn, best single ear of corn, best peck of oats, and best peck of wheat. Ten cash prizes, ranging from \$15.00 down to \$1.50, will be awarded in each class. All exhibits will be in the show room at 9 a. m. January 21, and remain until 4 p. m., January 22, and the contest is open to every grain producer in the state of Indiana.

The program for the Indiana Grain Dealers' meeting is completed, and topics of great interest will be discussed. Dr. J. A. T. Duvel, of Washington, will

deliver an address on "Grain Standardization" and President E. C. Eikenberry, of the Ohio Grain Dealers' Association, will talk on "Some Phases of Grain Association Work." John L. Ketchum, of Indianapolis, chairman of the Association on Industrial and Agricultural Education, will devote some time to the discussion of some things needful for legislation and otherwise in the advancement of this class of education. President C. D. Jones of the Grain Dealers' National Association and Secretary J. C. F. Merrill of the Chicago Board of Trade will both talk on the subject of "Speculation," while J. Laurence Laughlin, head of the Department of Political Economy of the University of Chicago, will deliver an address on "Banking and Currency Reform." It is probable that some of these addresses will be made at an entertainment to be held on the evening of January 21. There is also a docket of subjects to be considered and discussed by the trade at large without any assignment to individuals.

RECOMMEND PRESIDENT METCALF FOR RAILROAD AND WAREHOUSE COMMISSION

At a recent meeting of the board of directors of the Illinois Grain Dealers' Association, President Lee G. Metcalf, of that organization, was recommended for a place on the Railroad and Warehouse Commission. The action of the directors was incorporated in the form of a resolution which was forwarded to Governor-elect Dunne. The resolution states most truly:

Mr. Metcalf is a man of sterling worth, strict integrity and high character; a life-long Democrat and one who at all times, in season and out of season, has always upheld the principles of democracy, and a man whom all his neighbors will approve without regard to party affiliations.

Mr. Metcalf has been engaged in the country elevator business in Sangamon County for many years, and from his own knowledge and experience is fully qualified to fill the position to the benefit of all the people and with credit to your administration and himself.

Resolved, That as the grain shipping business is one of the largest and most important industries of the state, a man well versed therein, and one knowing the requirements of the shippers, we believe should be appointed to a place on the Railroad and Warehouse Commission.

W. L. Shellabarger, Decatur,
Geo. W. Cole, Bushnell,
A. G. Tyng, Peoria,
R. J. Railsback, Hopedale,
H. T. Truby, Joliet,
H. A. Hillmer, Freeport,
U. J. Sinclair, Ashland,

Directors.

Attest: S. W. Strong, Secretary.

COUNCIL OF GRAIN EXCHANGES MEETING.

The Hotel La Salle, Chicago, will be the scene of the fourth annual meeting of the Council of Grain Exchanges during the present week. Sessions will be held in the afternoon and evening of January 16 and the afternoon of January 17. The program, which includes a number of interesting addresses and special features, is as follows:

THURSDAY AFTERNOON SESSION (2 P. M.).

President's Address—J. C. F. Merrill.
Secretary's Report—J. Ralph Pickell.
Treasurer's Report—John W. Snyder.
Committee Reports:

Committee on Finances—T. E. Cunningham.

Committee on Bills of Lading—W. M. Hopkins.

Committee on Uniform Rules—Henry L. Goemann.

Committee on Publicity—J. C. F. Merrill.

Committee on Uniform Grades—E. H. Culver.

THURSDAY EVENING SESSION (7:30 P. M.).

Grain Standardization (Discussion).

The Telephone and Telegraph Situation—Frank Delany, Chicago, Ill.

Uniform Weight and Inspection Certificates—Chas. B. Riley, Indianapolis, Ind.

Election of Officers.

FRIDAY AFTERNOON SESSION (2:00 P. M.).

Report of Committee on Crop Improvement—J. C. Murray, Chairman.

Secretary's Report—Bert Ball.

(The report of Secretary Bert Ball will be one of the unique features of the convention, as he has prepared to illustrate his report with stereopticon views.)
Discussion.

Appointment of Standing Committees.

Selection of June Meeting Place.

Adjournment.

The following delegates have been selected by the various exchanges:

Kansas City, R. J. Thresher and D. F. Piazzek; St. Louis, John L. Messmore and Edward M. Flesh; Duluth, W. J. McCabe and C. F. MacDonald; Milwaukee, P. P. Douahue and W. A. Hottensen; Minneapolis, C. A. Magnuson and C. A. Brosn; Baltimore, F. A. Meyer and John W. Snyder; Peoria, Chas. H. Feltman; Buffalo, F. A. McLellan and L. S. Churchill; Cairo, H. E. Halliday; Omaha, E. P. Peck and E. S. Westbrook; Chicago, J. C. Murray and S. P. Arnot (voting delegates) and J. C. F. Merrill, H. N. Sager, E. A. James.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

Damages For Destruction of Crops of Grain

From an examination of many authorities, the Supreme Court of Nevada says (*Candler vs. Washoe Lake Reservoir & Galena Creek Ditch Co.*, 80 Pacific Reporter, 751) that it is convinced that a just and reasonable rule for the measure of damages for the loss of growing crops, where it appears that the crops have been entirely destroyed, or nearly so, and where there appears to be a reasonable certainty that they would have matured but for the wrongful act of the defendant, would be to allow the plaintiffs the probable yield of the crops under proper cultivation, the value of the yield when matured and ready for market, and deducting therefrom the estimated expense of producing, harvesting, and marketing them, and also deducting the value of any portion of the crops that may have been saved. Wheat seed, the Court holds, is a necessary expense of producing a wheat crop and, therefore, is not an element of damage. It was urged in this case that for the same reason the value of timothy and alfalfa seed should also be stricken out. This seed, however, the court says, was not planted for the purpose of producing a single crop, but to obtain a stand which would produce, ordinarily, two crops per year for many years without further seeding. It was found, because of the failure of the defendant to furnish water as agreed, that the stand of alfalfa and timothy was in the main killed out. The damage thus resulting was a damage to the realty itself, and would amount at least to the value of the seed planted to produce the stand.

In the suit recently filed by the Independent Grain Company at Wichita, Kan., against S. H. Moore and others for \$985.55, the verdict was rendered in favor of the defendants.

It is reported that John McLeod, recently charged at Winnipeg, Man., with defrauding the Manitoba Elevator Commission of certain sums of money has pleaded guilty to five charges of theft aggregating \$4,510.

Charles H. Wayne of Taylor Ridge, Ill., has filed suit against the Rock Island Railroad for the recovery of \$150, alleging that he lost 6,600 pounds of oats owing to the negligence of the company in shipping a consignment of grain to Chicago.

Jens Jensen has filed suit against the Shellbarger Elevator Company at Paxton, Ill., for 2,000 bushels of corn, claiming that he sold the grain to the elevator company and that it was shipped. The defendant denies the charge claiming that the corn was destroyed in the fire that consumed the elevator recently.

Prather & Groves of Williamsville, Ill., have been granted a perpetual injunction restraining Robert L. Cox from engaging in the grain business within a radius of five miles from Williamsville. The complainants alleged that the defendant entered into an agreement with them to observe this restriction when they purchased his elevator in 1908.

E. J. Baker, Jr., has brought suit against Lars Larson, the Trans-Mississippi Grain Company, the Updike Grain Company and the Farmers' Elevator Company at Sioux City, Iowa, for \$1,625, claiming that the amount is due on a farm leased by Baker to Larson. The grain companies were named as defendants owing to purchases of grain from Larson. The latter has filed a counter claim of \$3,272.

The Valley Grain Company of Brattleboro, Vt., has filed a bill in equity against Isaac K. Bascom of Vernon, Vt., who is alleged to be indebted to the company and avoiding payment on the ground that he has no money. An injunction has been issued to restrain Bascom from removing an alleged sum of money in the Brattleboro Trust Company which is said to have been deposited in such form that it can not be reached by a suit of law.

Contending that the Kansas City Board of Trade's arbitration board is illegal, W. B. Stowers of Fort Worth, Texas, buyer of 145,000 bushels of December corn, has enjoined that committee of the exchange in the Circuit Court. The suit is against the Kemper Mill and Elevator Company and the W. E. Henson Grain Company, but it is action by the committee which is really in question. The two firms were the brokers. Stowers claimed that he bought corn, beginning as early as August. Default was made on delivery when the trade was cleared and arbitration was asked. Stowers claims he should

get his money without any action by the arbitration board. The amount involved is \$8,000.

The National Elevator Company and the Atlas Elevator Company have petitioned the court at Winnipeg, Man., to wind up the affairs of the Manitoba Commission Company, Ltd. The Atlas Elevator Company was a creditor to the amount of \$525 and the National Elevator Company to the amount of \$499.85.

ARBITRATION DECISION.

The following arbitration decision has been kindly furnished by Secretary Gibbs of the Texas Association:

MEASURE OF DAMAGES.

W. L. Green Commission Co., appellant, vs. R. Lupton Grain Co., appellee.—Appeal from the decision of the arbitration committee of the Texas Grain Dealers' Association to the executive committee of said Association.

The above cause was considered by the arbitration committee May 15, 1912, when the claim of appel-

lant was denied, and an award rendered in favor of appellee, the costs of arbitration being assessed against said appellant.

We have carefully considered all the facts presented at the original trial, and neither of the parties being before us, our decision is reached from a consideration of the record.

From the testimony adduced before the arbitration committee, we find that on Feb. 2, 1912, appellant sold to appellee 3,000 bushels No. 2 kiln dried corn at 86½ cents per bushel, St. Louis terms, shipment immediate, Texas Group 3. It is further shown that appellee defaulted in his contract, and refused to accept the corn in accordance with the terms expressed in the original wires, which constituted the contract, and that on Feb. 6, 1912, he notified appellant that the contract was cancelled.

It is further shown that appellant did not sell the corn for appellee's account after receiving his notice of cancellation, but made up a statement of the loss, basing same on the market difference of No. 4 corn on February 6, 1912, the date appellee declared the contract cancelled. This claim amounted to \$45, being 1½ cents per bushel on 3,000 bushels.

While we reverse the decision made by the arbitration committee, we are of opinion that the claim should be based on the difference in value of No. 2 kiln dried corn in St. Louis on Feb. 6, 1912. We find that St. Louis No. 2 kiln dried corn was worth about 86¼ cents, Texas Group 3, on Feb. 6, 1912, and we therefore hold that the actual loss of appellant was only ¼ cent per bushel.

It is therefore ordered that R. Lupton Grain Company promptly pay to W. L. Green Commission Company, at St. Louis, Mo., the sum of \$7.50.

TRANSPORTATION

Grain, coal and coke are the only classes of freight which are not included in the advance switching charges of the Chicago Belt Railway, effective Feb. 1.

Considerable relief to grain congestion at the head of the lakes was caused by relaxation of the Canadian regulations respecting foreign vessels tying up at Canadian ports.

The harbors of Fort William and Port Arthur will be kept open by ice breakers until January 20, in order that the vessels which are wintering there may move from one dock to another.

Orders to move all the grain on Snake River, both above and below Lewiston, Idaho, made it necessary to put in commission the O. W. R. & N. steamers, *Lewiston* and *Spokane*. These two vessels moved 50,000 sacks of grain.

Tracklaying on the National Transcontinental Railway has been completed from Winnipeg to Cochrane and the first wheat train from the West was run over the section, reaching Cochrane on New Year's Day. It consisted of forty carloads of No. 1 Northern wheat.

There is a scarcity of vessels for carrying the grain crop along the Pacific Coast, especially in California and it is said that old sailing ships which had been towed to the Oakland estuary as obsolete in view of the growth of shipments by steamers a few years ago are being overhauled and patched up to handle the grain in the absence of steamer tonnage.

The Interstate Commerce Commission was petitioned on Jan. 2, by the Chicago Board of Trade to reduce to 7½ cents the rate on grain for export from Omaha. The price from that point to Chicago at present is 12 cents on wheat and 11 cents on coarse grain and the charge is made that this is unjust compared with a rate of 15½ cents from Omaha to New Orleans.

A little more than 1,000,000 bushels of grain have already been booked for shipment from Boston to European ports beginning in May. Not in years have bookings been made so early for such a quantity of grain. Freight rates are exceptionally high, practically all grain being placed for shipment at the rate of nearly seven cents a bushel, while two years ago, spring shipments of grain were carried for about two cents a bushel.

The reports given by the Canadian railways relative to the handling of grain crops show large increases in most instances. For the three months ending November 30 the Canadian Pacific Railway handled 10,716 more cars than in the same period last year. The figures are, for 1912, 43,649 cars, against 32,933 cars for 1911. The largest individual increase is on the part of the Grand Trunk Pacific Railway. Last year up to Nov. 30 it handled only 1,825 cars, and this year it has handled 8,184. The

Canadian Northern Railway has shown a slight decrease. The figures are 19,770 for 1912, as against 19,844 for 1911.

During the past season 13,325,105 bushels of grain went from Kingston, Ont., to Montreal via the St. Lawrence river, and 173 cargoes went through the Welland Canal to Kingston.

The readjustment of rates on grain and flaxseed and of the differentials on them among Minneapolis, Milwaukee, Duluth, Superior and other competitive points in the Northwest, has been ordered by the Interstate Commerce Commission.

Over one thousand cars of grain have been taken into the Canadian Pacific Railway Elevator at St. John, N. B., up to the present time, and the high total may be readily appreciated when it is learned that these were all new 80,000-pound cars built especially for grain traffic.

The new branch of the Great Northern Railway in Montana running from Lewistown to Moccasin has recently been opened. This passes through one of the best sections for wheat raising in the West. The line is 30 miles long and on each side of the track for the whole distance there are wheat fields, yielding from 35 to 50 bushels per acre. The building of this line means that much business will be diverted to the Great Northern Railway.

Freight trains have been running steadily on the new Drake-Devils Lake-Fordville line of the "Soo," and an immense amount of grain has been handled by the new road. There are seven grain elevators in the three new towns on that line in Pierce county, two at Orrin, two at Egan and three at Silva. In the five new towns on that line in Benson county there are from two to three elevators in each town, there being three at Filmore and three at Baker.

Supplement No. 20 to the book of grain rates has been issued by the Chicago Board of Trade. This states that in connection with the minimum weights on all grain subject to the official classification, in ordering cars for grain the shipper must order those cars of weight capacity equal to or in excess of the minimum carload weights prescribed. Whenever practicable cars of weight capacity equal to or in excess of the minimum carload weight prescribed will be furnished, and when available they must be used. If the carrier is unable to furnish a car of weight capacity equal to or in excess of the prescribed minimum carload weight and a car of less weight capacity is available, such smaller capacity car will be furnished and the minimum weight to be charged therefor will be its marked capacity, but in no case less than 40,000 lbs. This is aimed to take care of shipments loaded in cars of less than 60,000 pounds marked capacity where the carrier is unable to furnish a larger car, making as many cars as possible available for loading without penalizing the shipper.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

LOCAL CORN SHOW A BIG SUCCESS

Editor American Grain Trade:—As I am a subscriber of your paper and feel that you turn out a good paper to the trade I am sending you a newspaper clipping of a corn show that we recently had in our town.

It was a great show for our place, when we only had ten days to advertise it, but it seemed everything was in our favor. The farmers were through with their farm work, and the big crop of good corn, together with the beautiful winter day, made our corn show one great success.

I think these shows do a community a great deal of good. They bring the farmer and business man in touch with each other and also to a better understanding. I think the public in general is benefited by these shows.

Yours truly,
Vaughnsville, Ohio.

D. R. RISSER.

THE KANSAS CITY MARKET.

Editor American Grain Trade:—The receipts of grain in this market for the year 1912 show a total of 72,991,100 bushels, which is an increase of 22,302,272 bushels over that of the year 1911. Of this increase, wheat shows a gain of 18,000,000 bushels. Hay receipts of 364,464 tons, which is an increase over 1911 of 85,996 tons. The flour manufactured shows an increase of 258,000 barrels.

There are about forty grain elevators in Kansas City, including those owned by the mills and private warehouses, a total capacity of about 11,000,000 bushels. The present outlook is that, before the marketing of the new crop the elevator capacity will be increased four to five million bushels. The Board of Trade Inspection Department (office inspection) established early in the crop season has proved to be eminently satisfactory.

Reports of the present condition of the winter wheat in the territory tributary to this market are exceptionally fine.

Yours very truly,
Kansas City, Mo. Secretary, Board of Trade.

E. D. BIGELOW,

AN EXAMPLE OF DISREPUTABLE PRACTICE

Editor American Grain Trade:—For a year or two a man in Indiana, whose residence is unknown to the writer, has been going from town to town through the central part of the state, buying corn and oats from the farmers and scooping it into cars.

It is reported that at times he has proposed to local dealers that if they did not desire him to enter into competition with them he would stay out of their territory, for a stipulated amount of money, notwithstanding such a proposition, if accepted, is in violation of the anti-trust laws of the federal and state governments. This party succeeds in finding purchasers for his grain among the consumers, retail dealers, etc., and occasionally receivers and track buyers in terminal markets. The business has evidently not been profitable to him lately, as it is understood in many instances he has failed to pay the farmer for the grain purchased. Quite a little complaint has been made by sellers of grain, to the effect that this man has taken their grain, shipped it away and failed to pay them.

Of course that farmer who is so avaricious as to be willing to go past his regular grain merchant, who has an investment and maintains a regular market the year round, is not entitled to very much sympathy when he meets with losses such as are reported; yet the grain trade should not be annoyed and harassed by such men. The grain dealers of Indiana are doubtless as honorable and capable a set of business men as can be found in any line of business in the state or any other state for that matter, and handle business on as narrow a margin of profit as possible and much less profit than most other lines. Therefore they are entitled to fair treatment at the hands of all.

There is no occasion in this state for such practices as above indicated. It can only bring trouble and distress to the people who patronize this man and others of the same character; but that spirit of restlessness on the part of producers and the ambition to do something out of the ordinary is abroad, and there is no remedy for it. However the sympathy of the writer does not extend very far toward the farmer who has in the past struggled to get elevators built as near his farm as possible, only

to run away and leave them and take a chance on these nomads and vampires who infest some localities in the state.

In these times of scarcity of cars for the movement of grain, it would seem that the railroad companies would go as far as the law would permit them to protect the man who is located on their line with an investment in facilities where he can accumulate tonnage for the road and hold it for a reasonable length of time in which to transport it in harmony with the convenience of the carrier. Still we find some of the roads apparently discriminating against such regular trade in favor of these disreputable practices.

Yours truly,

INDIANA GRAIN DEALER.

PROGRESS IN PEORIA.

Editor American Grain Trade:—Business has prospered in all lines in Peoria during the past year. The city has also taken a step forward in new buildings and many public improvements in the way of paving streets, ornamental lights, etc. To its magnificent park system is being added a new levee park on its river frontage. The terminal facilities have been enlarged and improved. Besides its fourteen railroads more are headed this way for 1913. Its switching facilities are the least complicated of any market in the West and it is being recognized as the quickest gateway for business passing East and West or North and South.

The Peoria Board of Trade has shared in this general prosperity. The receipts and shipments show 2,200 cars in excess of a year ago, and this in spite of the fact that business was curtailed during a considerable period by extreme scarcity of cars. Its membership has increased during the year and it has improved and further safeguarded its Weighing Department for the benefit of its patrons. It has doubled its moisture testing capacity to prevent delays in handling grain as much as possible.

The Exchange is grateful to all who have contributed to this added prosperity.

Yours truly,
Peoria, Ill.

CHAS. F. FELTMAN,
President, Board of Trade.

WORK OF GRAIN DEALERS' NATIONAL ASSOCIATION.

Editor American Grain Trade:—If every grain dealer in the United States would stop to consider what the Grain Dealers' National Association is doing for the grain trade of this country, the membership of the Association would double within ten days. Whether or not you are a member, you are getting benefits from this work and I naturally conclude where a man is receiving a direct benefit to his business, that he is willing to bear his part of the financial burden to bring about these results.

The grain business is a distinct business and every interest needs an organization to look after the general welfare of that particular line of business. "What is everybody's business, is nobody's" is a true old saying and you, Mr. Reader, will acknowledge that there are many things transpiring which have a direct influence on your business which you alone, would not be able to correct but where you are joined together by an Association with other men in your line of business, your voice can be made effective.

For a number of years, the Grain Dealers' National Association has done active work along the line of trade rules and practices so that today, these trade rules are the recognized basis for any grain transaction in this country unless other particular terms are specified and all markets have largely confirmed the Association trade rules in their market terms.

The subject of uniform grades is familiar to every one and the work of this Association along that line is too well known to make comment necessary. During this year, the grain men face a question of probably more importance than they have ever had to face before, namely the Government standardization of grains and the passing of laws forcing these standards on all markets as well as passing laws giving the Government some system of supervision. Just what these rules will be, we do not know. Just what supervision the Government proposes to take over the application of those rules, no one knows. Just how drastic the law requiring the adoption of these rules will be, we are unable to state, but in all three you can readily see how vitally interested a grain man should be in seeing that no injustice is done the

trade. I am fully convinced that the Government will conscientiously endeavor to apply the new order of things in a way that will work no hardships but without the help of grain influences, they may unintentionally injure us and so the Grain Dealers' National Association, protecting the grain interests of the country, will work closely with the Government in order to get an acceptable adjustment of this question.

This is only one line of legislative endeavor that the Association has undertaken but it is the most active at the present time. If you are not a member of the Association now, you should join and help with your influence and membership.

Yours truly,
President, Grain Dealers' National Association.
Nashville, Tenn.

CHAS. D. JONES,

RECORDS BROKEN AT DULUTH

Editor American Grain Trade:—All records of receipts of grain in the Duluth market were broken in the year 1912, the total number of bushels handled reaching 125,657,503. Previous to this the record has been 88,409,000 bushels in the year 1907. The figures for last year include 22,630,056 bushels of Canadian grain handled in bond through elevators here, leaving the total of American grain 102,927,447 bushels. The elevators handling this grain are distributed between Duluth and Superior, but all of it is sold upon the Duluth Board of Trade.

The year 1913 should see this record equalled if the crop of next summer is a good one. A large amount of the crop of 1912 is still to come forward and will give an active business during the first half of the year.

A considerable expansion of elevator capacity is promised for the coming summer. The Great Northern Railway, which now has about 7,000,000 bushels of capacity, contemplates doubling it, the plan being to build a great house across the slip from the present big steel and concrete structure and move the large flour sheds to another location. The Consolidated Elevator Company also figures on adding about 2,000,000 bushels to its storage.

For the first time in ten years the milling output of the Head of the Lakes reached a total of approximately 1,000,000 barrels. The mills are prosperous and there is reason to believe that the milling industry here is in a fair way to be brought back to the high regard in which it was held in the nineties.

The Duluth Board of Trade during the past year has identified itself with all movements initiated by the trade of the country for its betterment and its defense. It placed upon its book of rules the anti-color rule which the Chicago Board of Trade claims to have been found effective. In general its membership is progressive and aggressive and is enthusiastic over the future of this market, of this community, and of this section of the great Northwest.

Yours very truly,
Duluth, Minn.

CHAS. F. MACDONALD,
Secretary, Board of Trade.

GRAIN BUSINESS IN MILWAUKEE

Editor American Grain Trade:—The volume of business done by the members of the Milwaukee Chamber of Commerce during the year has been very satisfactory. The reported receipts of grain of all kinds were 51,000,000 bushels, and final figures may show that the amount handled in this market was greater than this.

The shipments of grain for the year were about 28,000,000 bushels. About 30 to 40 per cent of the receipts enters into local consumption. The receipts of corn, oats and rye were the largest ever recorded, while wheat and barley were about an average. The volume of business during the closing months of the year was unusually large, and the promise of the best year for the grain people ever experienced is particularly bright for 1913.

Milwaukee had her share of the transportation troubles incident to the handling of an immense crop during the past fall, but conditions are much better than they were owing to the fact that the railway companies have enlarged their terminal facilities and improved them in various ways. The C. & N. W. Ry. Co. has built a great deal of extra trackage and has established at New Butler a large yard where the most of the grain arriving over that road is sampled, thus relieving the situation materially and avoiding the congestion from which the business formerly suffered.

Some new concrete storage capacity has been added to the elevator facilities of this market, something very badly needed. Much has been done to facilitate the handling of the grain business at Milwaukee, and we may mention one thing which gives promise of being a great saving in time and money to both the railroads and the grain people. What may be termed a "railroad clearing house" has been established in the "Gallery" of the Chamber, and while it is but an experiment as yet, it would appear as if it must necessarily be a great improvement over the former method. Representatives of all the railway companies and of the

Joint Rate Inspection Bureau are at a desk provided for the purpose at 11:30 every morning, and receive checks in payment of freight, cancel the freight bills and attend to the necessary transit matters, thus relieving the grain firms of the necessity of sending messengers to the railroad offices, and at the same time expediting the business of the railroad companies.

The outlook for 1913, as far as members of the Milwaukee Chamber of Commerce is concerned, is very bright. They expect to do the largest business this year of any year in the history of the market. The facilities for handling grain are here and the market is here. There is a consumptive demand for grain of all kinds, and the reshipping advantages and transportation privileges are of the best.

Yours very truly,
H. A. PLUMB,
Secretary, Chamber of Commerce.
Milwaukee, Wis.

HEAVY GRAIN MOVEMENT IN BALTIMORE.

Editor American Grain Trade:—The past year has been a very satisfactory one in all branches of trade. The banks, manufacturers and other industries, with few exceptions, report substantial gains as compared with the preceding year. The total value of exports from the port of Baltimore amounted to nearly \$100,000,000. The grain trade movement during 1912, in which the members of the Baltimore Chamber of Commerce are mainly interested, was larger than for several years past, and the amount of business transacted was very gratifying to both the domestic and foreign trade.

The most notable feature was the heavy movement of oats, largest in any year in the history of the grain trade. More than 14,000,000 bushels of oats were shipped abroad, which aided very materially in increasing the business at this port.

The activity in the movement of grain was confined to the last four months of the year, except during January and February, when the receipts of corn were large. The movement of wheat and corn was disappointing and did not reach expectations. While the exports of wheat were about the same as compared with 1911, about 60 per cent shipped was in bond. The shortage of the winter wheat crop, especially in the territory tributary to Baltimore, caused a decline in the movement of domestic wheat at this port. Exporters were unable to meet the price paid by milling interests and European buyers could purchase cheaper elsewhere.

The movement of the new corn crop began very slowly but increased considerably during the closing days of the year. The total production of corn in the United States being the largest ever grown, it would seem that, allowing liberally for home consumption, a record surplus should remain and with lower prices enable exporters to meet the views of the buyers abroad. It is confidently expected that the Western Maryland Railroad Company will erect one or two grain elevators here during the coming year. The connection of this road with the New York Central Lines should prove of great benefit to this port and mean increased business.

Therefore, with "bumper" crops of all kinds harvested, the grain merchants can look forward to a free movement during the year and an increased export trade.

Yours very truly,
JAS. B. HESSONG,
Secretary, Chamber of Commerce.
Baltimore, Md.

ST. LOUIS AS A GRAIN MARKET

Editor American Grain Trade:—The position of St. Louis as a primary grain market was fully maintained during 1912 and the completed reports now coming to hand from other markets will fully substantiate our claims as ranking third amongst the great primary grain centers of the United States.

The grain and flour trade for the past twelve months was one of the most satisfactory experienced by the interests in general for upward of a past decade. Not since 1902 have the receipts of wheat been as large as last year, a total of 30,541,673 bushels being recorded as compared with 17,076,505 bushels in 1911. The arrivals of coarse grains, too, were large, corn amounting to 25,979,030 bushels as against 23,621,410 bushels in 1911, and oats 21,529,690 bushels and 20,343,850 bushels, respectively.

Of flour, the receipts totaled 3,032,330 barrels as compared with 2,683,775 barrels the year previous. Of the amount manufactured by St. Louis mills, or by mills controlled by St. Louis interests, while the completed figures are not as yet in, the general indications are that they will fully equal those of a year ago.

Of all grains received the total was 79,997,310 bushels, as against 63,413,313 bushels, or more than 25 per cent. The general shipping demand for the past year is likewise most satisfactory, the outgoing movement of wheat being 21,196,225 bushels, against 12,163,785 bushels in 1911; corn, 15,231,215 bushels, as against 13,187,370 bushels, and oats, 12,956,330 bushels, as against 14,130,325 bushels. Of all grains the total amounted to 50,768,775 bushels

against 38,634,185 bushels the previous year, a gain of 12,134,590 bushels, or more than 30 per cent. The general speculative trade was also very good throughout the year, and is approximated at upward of 10 per cent better than that of 1911.

The forepart of the year there was quite a bit of apprehension on the part of the trade owing to crop alarms, and indicated scarcity, but in later months conditions were quite the reverse as reports showed yields above expectations, government reports were favorable and receipts large.

The year 1913 has started out under very favorable conditions, the general movement, both in and out, being very good and the brokerage houses receiving their share of business, and take it all in all everything at the present time points to another very satisfactory twelve months for the St. Louis grain trade.

Yours very truly,
EUGENE SMITH,
Secretary, Merchants' Exchange.
St. Louis, Mo.

ACHIEVEMENTS OF CHICAGO BOARD OF TRADE

Editor American Grain Trade:—There has been no important change in the rules governing the customs or practice obtaining on the board during the past year. The Chicago Board of Trade participated, in fact originated, the successful movement to overcome the vicious attitude of the Bureau of Chemistry to the movement in interstate commerce of fermenting grain, of grain from which weather stain had been removed by sulphur fumes, and participated in the Hall-Baker Case, thus rendering a great service to the grain growing and grain handling public.

It has also had a prominent place in combating inimical national legislation, as well as being active in furthering proposed beneficial legislation at Washington, the Pomerene Bill of Lading Bill, and other proposed measures, as well as taking a prominent part in prosecuting cases before the Interstate Commerce Commission. The Minneapolis rate case, in which the railroads attempted to discriminate against Chicago to the extent of 2½ cents per 100 pounds, is still pending. The so-called Duluth-Milwaukee cases involving rates from Northern Iowa and South Dakota, in which the railroads were disposed to discriminate against Chicago, are still pending, with the proposed advance suspended until the ruling is formally made.

This will serve as an example to indicate the alertness with which the several departments of this association care for the interests of its members and those of the Chicago public as well. It is ever vigilant in its watchful care of the business of this great market and of all influences affecting the welfare of its members.

Receipts, shipments and the incidental transactions thereto in the movement of the products of the farms to the consumers thereof is the most important business carried on in this country. It gives employment to a vast number of men in the handling and transporting of them, as well as in the commerce created by their distribution. The productions of less than six million farms, giving employment to fourteen million persons, are at the same time the food necessities of, according to late Washington departmental figures, more than ninety-six millions of people. The business thus created is one in which more persons have a deep interest than any other, for the vital reason that it is the commerce of the nation in a large part of the food supplies of the people.

The variations in the magnitude of the flow of this great stream of commerce depend on the size of the crops produced. It, therefore, follows that the surplus of them which leaves the community in which they are grown, constitutes the volume of business created by the handling of it in its transportation, storing and distribution. The men of the great market and distributing centers, whose business directly depends on it, ever look with keen anxiety to the size of each crop, with the knowledge that therein lies the determining factor of a promise of prosperity for the ensuing year, or instead, of being forced by a power beyond their control, to assume a waiting attitude with that hope which is ever perennial that the next crop will be one of great bounty, providing a generous surplus to enter the channels of commerce, in the carrying on of which they hope to participate with profit to themselves.

Therefore, primarily the Ruler of the Universe has more to do with the increase or the decrease of business in farm products than man can possibly have. However, men actively compete for such business as the movable surplus affords, and therein to a large extent resides the direct influence which determines the proportion of it passing through a given market, natural advantages always considered.

Chicago merchants have no mean reputation for being enterprising, and as a general statement, may be relied upon to get their full, fair share of anything of value obtainable through always being alive to the opportunity and knowing some effective method of possessing themselves of it. In this way the business of 1912 was held in line with

former years. The cars of grain weighed by the Board of Trade weighmaster during the year were 332,536, being 21,205 more than in 1911. The total bushels of all kinds weighed during the year were 498,574,314, this not including much of the seventy-five millions consumed locally.

These figures indicate that the business passing through this great market is not suffering for want of enterprising care of our merchants. It cannot be claimed, however, that the year 1912 has been one above, if indeed equal to its immediate predecessors in general prosperity of the grain trade of the city. Large crops conduce to the general prosperity of the country and are considered by the public generally as practically securing it for a period of time. However, a large yield is not always uniformly beneficial, for it frequently happens that in consequence of an extra crop the price declines below a good or satisfactory profit paying level, and makes the farmer no money. If the farmer makes no profit, then no new wealth is created, and when this becomes general throughout the country general prosperity is in a large measure wanting. Railroads, because of quantity to be transported, commission merchants because of more bushels to be handled at a rate per bushel, are favored, but the producers' prosperity underlies general prosperity. Again, a large crop creates confidence in steadiness of prices just as small crops contribute to the opposite belief, and notwithstanding that it is an economic principle that steadiness of values results in increased consumption, it does not conduce to a good, and often not to a fair, margin of profit to the handler.

With confidence in steadiness of values, the need of hedge selling is less urgent, and this creates dullness with those members of the exchanges who make a specialty of that business. Without a good quantity of hedge contracts outstanding there is no solid foundation for speculation, because the speculator can no more do business without something tangible to deal in than a groceryman can without a stock of goods; that is, no volume of business of purely a speculative nature can be expected, nor is it desirable, when opinions only are the basis of such contracts. Something more tangible than opinions are an absolute necessity. Therefore, when there is some millions stored at commercial or milling centers, and hedged by the owners, the outstanding contracts, like a stock of merchandise, must have ownership, and the selling and buying of them constitutes business in a tangible article.

The buyer of such contracts being, in fact, the real owner of the grain, the holder of it, whatever his purpose relative to its ultimate use may be, is in the position of a warehouseman or storage merchant during such time as he holds the commodity in store and has an outstanding hedge sale as insurance against loss. With large stocks of grain or provisions thus hedged, business of this class with commission merchants is good, but when the commodities are held back on the farm, as is becoming more and more the practice each succeeding year, inasmuch as few farmers hedge their crops, assuming the risk incidental to ownership themselves, the function of the speculator is lessened. Therefore, large production tends to restrict transactions of this nature so that we may not expect a good hedging business until more of the present crop has accumulated in storage, and conditions regarding its future value have changed somewhat. A heavy weight holds down almost anybody, so a heavy supply of farm products holds down the price, and being held down there is less inclination to hedge because of there being less apparent need of doing so.

With increased failures, the same being 15 per cent over the year 1911, with high interest on money, and with much uncertainty of the future because of tariff revision, banking and currency legislation and such other disturbing factors as are incidental to a complete handing over of the reins of government from one party to another, especially with pledges to the people that certain changes of universally great importance are to be made in the policies of the government, I am constrained to conclude, because of the reasons given and others not named, that the year 1913 cannot intelligently be regarded optimistically. The great and almost single factor of safety, large production, whether marketed at new wealth producing prices or not, will give so much substance to things commercial, there is no reason for being pessimistic to the extent of expecting panics or other demoralizing conditions.

My conclusion is, the year 1913 will be typical of a waiting attitude in business, with a consciousness of inherent strength capable of maintaining financial soundness, at least reasonable steadiness, but without hope of general prosperity, not unmindful of the effect of the vicissitudes of the seasons and their controlling influence on both production and prices of products. The crops of 1913 may, before the year is closed, create an entirely new viewpoint, and this important feature should never be left out of our calculation.

Yours truly,
J. C. F. MERRILL,
Chicago, Ill. Secretary, Board of Trade.

HAY AND STRAW

The alfalfa mill at Parnell, Wyo., is practically complete.

The alfalfa mill at Dodge City, Kan., which was recently destroyed by fire, will be rebuilt.

Con Howard of Maquoketa, Iowa, has purchased the hay and grain business of Cook & Lafayette.

The Arizona Alfalfa Mill and Feed Company is being organized at Chandler, Ariz., by ranch holders.

There were heavy shipments of hay from the San Jacinto Valley in California during the month of December.

The Chicago North-Western Railroad is considering several sites in Chicago for the erection of a hay warehouse.

The Auto Fedan Hay Press Company of Kansas City, Mo., will erect a warehouse of brick construction at a cost of \$8,000.

The Brokamp-Cavanaugh Company has been incorporated at Cincinnati, Ohio, with a capital stock of \$10,000 to engage in the hay and grain business.

Freeman & Tapp have sold their hay, grain and produce business at Ocilla, Ga., to T. L. Purvis and it will be conducted under the firm name of the Ocilla Brokerage Company.

It is said that Smith County, Kan., shipped out a large quantity of alfalfa during December. It brought about \$10 a ton, baled and delivered on board the cars at Smith Center.

The Latonia Hay and Grain Company has been incorporated at Covington, Ky., with a capital stock of \$10,000. The incorporators are M. S. Fogarty, Walter McKeon, E. T. Rice and Harry Burton.

It is said that a large portion of the hay crop raised in South Dakota the past year has been baled and shipped. The baled product has been commanding from \$7 to \$8 per ton on board cars.

S. Abbott Willits has purchased the name and outstanding stock of the firm of E. L. Rogers & Co., hay, feed and grain commission merchants at Philadelphia, and Charles S. Rogers has retired from the business.

The Consumers' Hay and Grain Company is building a hay warehouse at Chicago. The company's former plant was wiped out by fire about five months ago. The new structure is of concrete construction throughout.

Thomas C. Edwards of Alvin, Texas, recently filed a complaint before the Interstate Commerce Commission against the Santa Fe and connecting railroads, asking that the rate on hay from Alvin to Louisiana points be reduced from 23½ cents to 20 cents. He also claimed reparation.

The shipments of baled hay from the port of Montreal, Can., for the season of 1912 show a decrease of 290,179 bales as compared with last season and a decrease of 53,932 bales as compared with the season of 1910. The various firms exported 563,783 bales during the season of 1912.

It is reported that the California State Association of Horticultural Commissioners has recommended a more stringent quarantine for alfalfa and modifications of the present quarantine against Southern States on nursery stock. An estimated value of \$50,000,000 has been placed on the alfalfa crop in California and the commissioners assert that all that is possible should be done to protect it from the alfalfa weevil and they have asked that a quarantine be placed on alfalfa hay, alfalfa seed and beehives as these are said to carry the weevil.

PRELIMINARY PLANS FOR NATIONAL CONVENTION

The twentieth annual convention of the National Hay Association, which will be held in Peoria, Ill., on June 24 to 26, promises to be one of the greatest sessions in the history of that body. The officers and members of the National Hay Association are going right ahead with their arrangements, notwithstanding the fact that it is still several months distant. Secretary J. Vining Taylor will leave for an extended trip through the West on January 19, in the interests of the Association, and much of his work will consist in completing the tentative plans which have already been drawn up for the meeting.

The city of Peoria is quite enthusiastic and promises to co-operate with the committee from the local organization, in order to make the convention successful from every standpoint. A. D. Campbell, of Peoria, has been made chairman of the committee

on arrangements. The Hotel Jefferson will be the headquarters of the convention.

THE RAISING OF TIMOTHY

The question of whether the raising of timothy actually pays is greatly agitating the minds of producers all over the country, and if some authorities have their desires in the matter, future timothy crops will be greatly curtailed. A writer in *The Country Gentleman* points out that timothy has been called a soil robber because a crop of timothy will take more nitrogen per acre out of the land than the ordinary amount of fertilizer for any other crop will restore to it. Though timothy, as compared with other hay crops, is low in protein and fat, it is very high in carbohydrates and above the average in crude fiber. For this reason it has become the great hay grass in the eastern part of the United States.

If grown alone, however, without a legume, such as clover or alfalfa, timothy sooner or later wears out the soil or so reduces its fertility as to make the raising of crops on it unprofitable. Recent tests made on soil fertility, by the Illinois Experiment Station, of different rotations, showed that in the rotation which contained timothy and no legume the loss of nitrogen amounted to about 1,900 pounds for a 160-acre farm. Any farmer can readily see that at this rate it would not take many years to ruin the most fertile land in the country. It is against the growing of timothy or of any crop for any length of time without a legume that warning is given by the experiment stations.

Then again it is pointed out that on the very best land in the United States and Canada the average yield for timothy is about 1.5 tons an acre. Some lands yield as high as 4 tons to the acre, but this is exceptional. If 2 tons, which is a high average, is raised to the acre, what would the farmer make from his crop? Some recent investigations made at Cambridge, Massachusetts, show that timothy hay consumed there cost \$24.50 a ton. But the farmer got only \$8 a ton, or at best only \$16 an acre—a very poor-paying crop when labor, fertilizer and loss of soil fertility are considered. Though the crop is hard on the soil, the marketing conditions are harder on the grower's pocket, if the above example reflects conditions elsewhere.

REVISED GRADES OF HAY AND STRAW

At the convention of the National Hay Association, held in Kansas City last July, the rules for grading hay and straw were revised, and a brief digest of the changes was published in the August issue of the "American Grain Trade." Since that time, there has been the widest publicity given to the revised grades, but it has been impossible to cover the trade to the fullest extent and at the request of Secretary J. Vining Taylor we are herewith publishing in full the grades and inspection and weighing rules, which are as follows:

HAY

No. 1 Timothy Hay—Shall be timothy with not more than one-eighth mixed with clover or other tame grasses, properly cured, good color, sound and well baled.

Standard Timothy—Shall be timothy with not more than one-eighth mixed with clover or other tame grasses, fair color, containing brown blades, and brown heads, sound and well baled.

No. 2 Timothy Hay—Shall be timothy not good enough for No. 1, not over one-fourth mixed with clover or other tame grasses, fair color, sound and well baled.

No. 3 Timothy Hay—Shall include all hay not good enough for other grades, sound and well baled.

Light Clover Mixed Hay—Shall be timothy mixed with clover. The clover mixture not over one-third properly cured, sound, good color, and well baled.

No. 1 Clover Mixed Hay—Shall be timothy and clover mixed, with at least one-half timothy, good color, sound and well baled.

Heavy Clover Mixed Hay—Shall be timothy and clover mixed with at least one-fourth timothy, sound and well baled.

No. 2 Clover Mixed Hay—Shall be timothy and clover mixed with at least one-third timothy. Reasonably sound and well baled.

No. 1 Clover Hay—Shall be medium clover not over one-twentieth other grasses, properly cured, sound and well baled.

No. 2 Clover Hay—Shall be clover, sound, well baled, not good enough for No. 1.

Sample Hay—Shall include all hay badly cured, stained, threshed or in any way unsound.

Choice Prairie Hay—Shall be upland hay of bright, natural color, well cured, sweet, sound, and may contain 3 per cent weeds.

No. 1 Prairie Hay—Shall be upland and may contain one-quarter midland, both of good color, well

cured, sweet, sound, and may contain 8 per cent weeds.

No. 2 Prairie Hay—Shall be upland, of fair color and may contain one-half midland, both of good color, well cured, sweet, sound, and may contain 12½ per cent weeds.

No. 3 Prairie Hay—Shall include hay not good enough for other grades and not caked.

No. 1 Midland Hay—Shall be midland hay of good color, well cured, sweet, sound, and may contain 3 per cent weeds.

No. 2 Midland Hay—Shall be fair color, or slough hay of good color, and may contain 12½ per cent weeds.

Packing Hay—Shall include all wild hay not good enough for other grades and not caked.

Sample Prairie Hay—Shall include all hay not good enough for other grades.

ALFALFA.

Choice Alfalfa—Shall be pure alfalfa of a bright green color, fine stemmed, leafy, sound and well baled.

No. 1 Alfalfa—Shall be reasonably coarse alfalfa of a bright green color, or reasonably fine leafy alfalfa of a good color and may contain two per cent of foreign grasses a trace of air bleached hay on outside of bale allowed, but must be sound and well baled.

Standard Alfalfa—Shall include all alfalfa not good enough for No. 1, including pure sound, brown alfalfa. Also bright alfalfa containing not more than five per cent foreign grasses, sound and well baled.

No Grade Alfalfa—Shall include all alfalfa not good enough for other grades.

STRAW.

No. 1 Straight Rye Straw—Shall be in large bales, clean, bright, long rye straw, pressed in bundles, sound and well baled.

No. 2 Straight Rye Straw—Shall be in large bales, long rye straw, pressed in bundles, sound and well baled, not good enough for No. 1.

No. 1 Tangled Rye Straw—Shall be reasonably clean rye straw, good color, sound and well baled.

No. 2 Tangled Rye Straw—Shall be reasonably clean, may be some stained, but not good enough for No. 1.

No. 1 Wheat Straw—Shall be reasonably clean wheat straw, sound and well baled.

No. 2 Wheat Straw—Shall be reasonably clean; may be some stained, but not good enough for No. 1.

No. 1 Oat Straw—Shall be reasonably clean oat straw, sound and well baled.

No. 2 Oat Straw—Shall be reasonably clean; may be some stained, but not good enough for No. 1.

INSPECTION AND WEIGHING RULES.

Rule No. 1. A competent chief inspector or inspectors shall be appointed by the President of the National Hay Association at such point or points making requests and agreeing to abide by the code of rules and regulations hereinafter mentioned, provided, that each individual point shall be self-sustaining and subject to the approval of the Board of Directors.

The tenure of office shall exist until his successor shall be appointed and qualified.

Rule No. 2. No person shall be eligible to hold the position of inspector who is directly or indirectly interested in any person, firm or corporation engaged in the handling of hay or straw, or engaged in the hay business himself.

Rule No. 3. At the time of entering upon his duties as inspector of the National Hay Association, he shall file with the Secretary a good, sufficient and acceptable bond to the Association in the penal sum of \$2,000.00, to be furnished by a reliable bond or indemnity company; conditioned upon the faithful performance of the duties of his office, such bond to be paid for by the association. He shall also file with the secretary a sworn affidavit for the faithful performance of his duties.

Rule No. 4. The salaries of the chief inspector and his assistant shall be fixed by the Board of Directors.

Rule No. 5. The inspection and weighing fee shall be fixed by the Board of Directors.

Rule No. 6. The fees per car charged for the inspection and weighing shall be sufficient to cover the cost of inspection and any expense incurred by the National Hay Association. All fees collected must be paid to the Treasurer of the National Hay Association at such time and in such manner as the secretary-treasurer may direct.

Rule No. 7. An Appeal Board, to consist of three members of the National Hay Association, who shall be appointed annually by the president, at and for each point, to whom aggrieved parties may at the time of receiving the certificate of inspection and car in question file an appeal; said Appeal Board shall act at once. Where it appears that any of the Appellant Board are interested in the case at issue, he shall retire and the remaining two appoint a third disinterested member to act with them and their decision shall be final.

Rule No. 8. The president shall have power to suspend any inspector or assistant inspector charged with any incapacity or misconduct in office, subject to the action of the Board of Directors.

Rule No. 9. The duties of the Secretary should be to keep a thorough and correct record of the acts of each inspector or assistant inspector, the fees received and disbursements made by him and incorporate same in his annual report to each annual convention, or at any intermediate time that the administration might request.

Rule No. 10. It shall be the duty to make daily, weekly or monthly reports to the secretary of the National Hay Association at his discretion of inspection done, and at such time as may be required remit all fees to the treasurer of the National Hay Association.

BARLEY AND MALT

[Special Report.]

CHICAGO BARLEY MARKET.

BY A. L. SOMERS.

President Somers, Jones & Co.

The barley market during the past two weeks has advanced strongly, the result chiefly of the continued heavy export demand for feed barley. Buyers of this quality of barley for export during the past few days have paid as high as 55 cents for 48 pounds or more test, and from 53 to 54 cents for 45 to 46 pounds or under, test weight.

European buyers require certain test weights on barley and sales are based almost wholly thereon, regardless of low quality otherwise.

The advance in this feed barley naturally resulted in a corresponding advance, especially in the lower grades of malting barley, but the entire list was strengthened by the advance in the low grades. Indications at present point to a continued good demand for the feed barley. European buyers seem anxious for it and, as there has been a fair advance in oats and corn also, it stands to reason that the demand from the other side will remain good for the near future, and perhaps for a large part of the season. The lower ocean freight rates are in favor of a continued demand also.

Malting barley ranges from 56 to 74 cents, sales mainly from 57 to 70 cents per bushel, the outside hard to beat except for extra fancy quality. Local buyers are mostly well supplied with barley and somewhat indifferent, but the malt trade, while unsatisfactory on account of the low prices, is active and the out shipments heavy.

Consumption because of the low prices will naturally be increased somewhat, as there is less inducement to use substitutes in the manufacture of beer and it points to a continued heavy out movement of malt and consequently to a continued heavy demand for barley.

On the other hand, it is beginning to look as though the crop had been somewhat overestimated. We get numerous reports indicating that a large part of the barley crop in certain territory is already moved and that there will be little more to come forward. The low prices being an inducement to hold barley and to feed more liberally on the farms than usual would also indicate that a heavy movement from now on is quite unlikely. Under the circumstances, we are inclined to think

that barley values will hold their own or advance further.

The car congestion is also a bullish feature. It prevents free movement of barley from the territory which has fair quantities of it left to ship, and the consequent slow distribution is, in effect, the same as though the barley were not raised, it being, under the circumstances, not available for the manufacturing trade.

Take it as a whole, we feel friendly to barley values, under the circumstances, and are inclined to advise country shippers to go slow on barley "to arrive." We believe consignments on the spot market will net best results.

We have received from the Froedtert Malting Company of Milwaukee, Wis., a large wall calendar illustrated with a very pleasing reproduction of a barley field.

It is said that the British steamer "Indra" sailed from San Francisco for the United Kingdom on December 25 with the largest cargo of barley ever shipped from that port. There were 160,000 bags of the California grain that weighed over 9,000 tons.

It is reported that there is a market for American barley in Germany for both malting and feeding purposes and that Hamburg importers expect that shippers in the United States will do some business in Germany during the next few months.

The Commercial Grain and Malting Company has been incorporated at Cannon Falls, Minn., with a capital stock of \$50,000. The incorporators are Anthony B. Mensing, Matthew Holland, C. Bye of Cannon Falls and Alec. A. Anderson of Red Wing, Minn. The government of the corporation is vested in three directors and the officers are president, vice-president, secretary and treasurer.

It is reported that with a bumper crop of barley, estimated at 550,000 tons, California grain men stand to lose heavily owing to the lack of tonnage for handling the crops. It is said that the utmost carrying capacity of all the vessels in sight is between 50,000 and 60,000 tons. The ships of England and other nations, which formerly had ample space for the grain, have all their tonnage reserved months ahead and most of them are engaged elsewhere at such high rates that they are not considering Pacific Coast shipments. It is claimed that the situation in California is duplicated all along the Coast including British Columbia.

FIELD SEEDS

The Colorado Seed and Nursery Company has been organized at Denver, Colo.

A new seed corn company has been formed at Chandler, Ill., by A. T. Lucas.

The Fort Smith Seed and Feed Company of Fort Smith, Ark., has built a warehouse.

The Henry Fields Seed Company of Shenandoah, Iowa, has built an addition to its plant.

The Rape Seed Company has been incorporated at Cincinnati, Ohio, with a capital stock of \$5,000.

The Lacy Seed and Hay Company has succeeded White & Lacy, seed merchants at Noblesville, Ind.

The Michael Seed Building at Sioux City, Iowa, has been completed. The front is of white enamel brick.

The Albert Dickinson Company will erect a plant at Chicago to screen and grade all kinds of grain.

The Gregory Farm Seed Company has been incorporated at Bay City, Mich., with a capital stock of \$30,000.

A seed corn warehouse with a capacity of 90,000 bushels has been constructed at Abingdon, Ill., by Charles Cline.

C. C. Vale has entered the seed business at New Carlisle, Ohio, and contemplates erecting a building in the spring.

The twenty-ninth annual seed catalogue of Northrup, King & Co., of Minneapolis, has been received at this office. It contains 143 pages and is entitled "Sterling Seeds." It not only includes

the usual full quota of seed information, but lists a line of poultry feeds and seed machinery.

The Klein Company of Harrisburg, Pa., has leased the Holmes Seed Building and will open a store with C. Bing as manager.

Charles H. Lilly, seed and flour merchant of Seattle, Wash., may establish a branch house at Los Angeles, Cal., prior to the opening of the Panama Canal.

The Dominion of Canada Department of Agriculture has announced that all seeds can be tested without cost at the Dominion Seed Laboratory at Calgary, Alta.

The Jones Seed Company has been incorporated at Grand Rapids, Mich., with a capital stock of \$12,000. The principal stockholders are L. F. Jones and F. M. Beach.

George E. Evans has sold the G. E. Evans Seed Company at Gainesville, Fla., to H. J. Babers, and it is rumored that Mr. Evans will open a seed store in Jacksonville, Fla.

The name of the J. E. Wing & Bros. Seed Company, of Mechanicsburg, Ohio, has been changed to that of the Wing Seed Company, and the capital stock has been increased to \$100,000.

The Swep Taylor Seed Company recently opened a store at Jackson, Miss., to conduct a retail and wholesale seed business. The firm is composed of Swep Taylor and his son, S. S. Taylor.

The raising and marketing of alfalfa seed is growing in favor in Stanislaus County, Cal., although the enterprise is still in an experimental stage. The

first seed was raised last year, when 100 sacks were sold to the Grange Company in that county. The past year approximately 600 sacks have been raised.

The Pieters-Wheeler Seed Company has been incorporated at Hollister, Cal., with a capital stock of \$25,000. The incorporators are A. J. Pieters and H. M. Pieters, of Hollister, and L. W. Wheeler, of San Jose.

California has removed the ban from alfalfa seed received from Utah, provided that it is packed according to directions and properly fumigated. The quarantine still remains, however, on alfalfa and all other hay as well as on bees.

Oscar H. Will & Co. of Bismarck, N. D., have purchased a large factory building near the Northern Pacific tracks which has been remodeled into a seed warehouse. They have just issued their thirtieth annual seed catalogue. It is an 80-page book with an attractive cover design and is well illustrated throughout.

It is reported that R. G. O'Malley, Winnipeg, Can., Provincial Noxious Weeds Inspector, is proceeding against all mill and elevator owners who allow screenings containing seeds of noxious weeds to be placed in any roadway, street or lane throughout the province of Manitoba. The penalty is from \$50 to \$100.

The E. C. Comstock Company has been incorporated at Springport, Mich., with a capital stock of \$15,000, to purchase, sell and store all kinds of farm and garden produce, including seeds and fruits. The incorporators are E. C. Comstock, of Springport, and James M. McKay, Frank L. Smock and Frank K. Safford, of Fort Wayne, Ind.

The Holmes Seed Company, of Harrisburg, Pa., has moved into new quarters at 119 South Second street. The four-story building which the company now occupies has been remodeled and has a frontage of 23 feet and a depth of 130 feet. The four floors and a basement provide 20,000 feet of floor-space. Each department is separate, including a mixing room and a cleaning room. The growth of the business has been very satisfactory, the house having been established by H. L. Holmes about sixteen years ago.

It is said that Secretary of Agriculture Wilson is preparing to enforce rigidly the law prohibiting the admission into the United States of certain adulterated grain and seeds unfit for seeding purposes. All seeds of alfalfa, Canada blue grass, Kentucky blue grass, awnless broom grass, clover, meadow fescue, millet, orchard grass, rape, redtop and timothy, when adulterated or when containing more than three per cent by weight of weed seeds, are shut out by this act. It also prohibits the importation of alfalfa seed and red clover seed containing more than ninety dodder seeds per pound.

Jesse Trull, known throughout Canada as the Clover King of Canada, is dead. He was highly esteemed and honored for his unusual success in advancing farming methods. He was born in 1825. Soon after he engaged in farming he became convinced that the methods used by many farmers would soon do away with the fertility of the soil unless something were done to replenish it. While testing systems of crop rotation, he became interested in the peculiar power of clover as a soil restorer, and this was long before the nitrogenous properties of this plant were known. In time he made a specialty of growing clover for seed.

Dr. Jacob G. Lipman, director of the New Jersey Experiment Station, has made plans for the enforcement of the new seed law which recently went into effect in that state. By the provisions of this law the State Experiment Station at New Brunswick is charged with the testing of all seeds offered for sale in the state, the tests being made as to purity and germination co-efficient. The act does not provide for prosecutions of those selling inferior seeds, but will depend for its efficiency on publicity. The experiment station will send agents about the state purchasing seeds in the open market and will publish the result of the tests in bulletins to be sent out, giving place and time of purchase, name of seed distributor and result of test. The station will also test any seeds sent by individuals but not for publication.

The annual meeting of the Wisconsin Agricultural Experiment Association was held at Madison, Wis., on January 10 and 11. The association, of which C. P. Norwood is president and R. A. Moore is secretary, has accomplished remarkable work in the state by its encouragement of pure-bred grains. Membership in the state association is restricted to alumni of the agricultural college, but there are county organizations in twenty-seven counties, and these are composed of men active in farming. Secretary Moore states that in another year there will be thirty-seven county organizations, and no county is permitted to organize until the pure grain has been fairly well distributed. Practically every county in southern Wisconsin now has a county organization, the counties unorganized being in the northwest, but Clark County is now seeking a charter.

FIRE S-CASUALTIES

W. I. Thompson's elevator at Bryant, S. D., was slightly damaged by fire recently.

The elevator of Chappel & Chappel at McClusky, Ill., was totally destroyed by fire recently.

The elevator of Davis & Mayberry at Pulaski, Ill., was completely destroyed by fire on January 8.

The elevator of Elmore & Lemmon at Roadhouse, Ill., was slightly damaged by fire on January 6.

The elevator of the Canadian Pacific Railway at Prescott, Ont., was slightly damaged by fire recently.

Vivian Tyler, colored, was killed in a grain shaft in the plant of Callahan & Sons at Louisville, Ky., on December 19.

Fire partially destroyed the elevator of the Plainview Mill and Elevator Company at Plainview, Minn., recently.

The A. R. Hopkins Company, dealers in grain and cement, at Bangor, Maine, suffered a heavy loss by fire on December 25.

The feed store of L. B. Hanna at Logansport, Ind., was badly damaged by fire on January 6. The loss was several thousand dollars.

The wholesale feed business of S. N. Bevins & Sons at Fort Smith, Ark., was destroyed by fire recently, resulting in a loss of \$10,000.

The elevator at Merritt, Ill., was destroyed by fire on December 31, at a loss of \$10,000. It was the property of the estate of E. H. Greenleaf.

The Royal Elevator at Yeomans, near Weyburn, Sask., was destroyed by fire recently. It contained 15,000 bushels of wheat and an equal quantity of flax.

The Robert Ray Grain Company of Delavan, Kan., suffered the loss of an elevator by fire recently. The loss of \$6,000 was partially covered by insurance.

The elevator of the New London Milling Company at Asbury (R. F. D. from Granite Falls), Minn., was destroyed by fire recently. The house contained about 5,000 bushels of grain.

The engine house of the Farmers' Co-operative Exchange Elevator at Laporte City, Iowa, was somewhat damaged by fire recently. The blaze started from a defective flue.

John McCormick, a grain dealer, was attacked by a vicious bulldog on December 17 at Gary, Ind., and before the animal could be driven away Mr. McCormick was painfully injured.

C. A. Aafedt, agent for the Osborne-McMillan Elevator Company at Ryder, N. D., sustained a bad cut on the head recently while attempting to make some belt repairs under the driveway.

Charles M. Wright recently caught his right hand in a conveyor in the Duvall Elevator at Maroa, Ill., and the member was so severely injured that amputation below the elbow was necessary.

The Amenia Elevator at French, seven miles west of Fergus Falls, Minn., was totally destroyed by fire on January 7. It had a capacity of 20,000 bushels and was almost filled with grain.

Fire did about \$1,000 damage to the building occupied by the Evansville Hay and Grain Company at Evansville, Ind., on December 28. The blaze is said to have originated from a defective flue.

Fire destroyed a large portion of the two-story building occupied by B. F. Schaub & Son, hay and feed merchants, at Chicago, and considerable hay and feed were burned. The loss was about \$5,000.

James Kelly, manager of an elevator at Plevna, Mont., was recently found entangled in the fly-wheel of the engine of the plant with practically every bone in his body broken. His death soon followed.

Arthur Bolke, an engineer in the Farmers' Elevator Company at Elgin, N. D., was found unconscious recently in the engine room of the elevator, where he had been overcome by fumes from gasoline while sleeping.

Six cars of feed shipped from Toledo, Ohio, by the Moffett Grain and Milling Company and destined for the interior of Newfoundland are believed to have been lost on the wrecked steamer Florence that went down off the coast of Newfoundland on December 22.

The house of the Hillsboro Grain and Elevator Company at Hillsboro, Texas, was totally destroyed by fire on December 16. The origin of the fire is unknown but the flames had made great headway before discovered. There was a small amount of grain in the house and the plant and contents were valued at \$12,000, with insurance of \$1,500. E. H.

Crenshaw and L. Holloway were the principal stockholders.

The Farmers' Co-operative Elevator at Scarville, Iowa, was burned on December 28, together with about \$8,000 worth of wheat. The fire is supposed to have started in the boiler room. The loss is covered by insurance.

The warehouse and storage room of the Paris Milling Company at Paris, Texas, was destroyed by fire on December 17, entailing a loss of \$20,000 partially covered by insurance. John Proctor, a fireman, was injured.

A. Teslow, manager of the Sheffield King Elevator at Faribault, Minn., was severely injured recently by a fall. While employed in the upper part of the elevator a plank on which he was standing gave way and he fell 16 feet into an empty grain bin.

Two elevators of the Graymont Farmers' Grain Company at Graymont, Ill., were burned on January 10. Both were filled with corn held in storage for the farmers and the loss was \$70,000. Spontaneous combustion is believed to have caused the fire.

Fire of unknown origin partially destroyed the hay and grain warehouse of the Droge Elevator Company at Council Bluffs, Iowa, on December 22. The loss was placed at \$5,000. The building was a one-story brick structure and was erected about seven years ago.

Fire broke out in the grain and feed store of J. L. Prosser & Co. at Duluth, Minn., on January 6, and three horses were burned, a two-story frame warehouse was gutted, several box cars were destroyed and a large stock of grain and feed was lost. The loss was about \$2,000.

Fire damaged the hay and grain warehouse of J. E. Muegge at San Antonio, Texas, recently, to the extent of \$5,000. The flames originated in a pile of hay. The warehouse was valued at \$3,000 covered by \$2,000 insurance and the contents were valued at \$4,000, covered by blanket insurance.

George Sholey, a carpenter employed on the new elevator at Fairdale, N. D., fell 38 feet recently, striking a plank during his descent and landing in one of the bins. He was badly bruised but it is said that he immediately regained his feet and suffered no serious effects from his experience.

Fire completely destroyed the seed corn house and contents owned by L. S. Griffith & Son at McNabb, Ill., recently. The building was filled with selected corn for next year's seed market. It is supposed that the fire originated from the furnace used for heating. The loss is partially covered by insurance.

Fire of unknown origin destroyed the Shornden Elevator at Ponca City, Okla., on December 18. The loss on the building was \$6,000 and on the machinery \$2,000, with insurance of \$3,000. The house contained about 7,000 bushels of corn. It was erected about 13 years ago by George Shornden and J. M. Shornden.

Nels J. Linge, an agent for the Dodge Elevator Company at Hastings, N. D., was smothered in a bin of grain recently. The citizens of the town noticed that the engine was running at the dinner hour and that the agent had not gone to his home. On investigation his body was found in the bottom of an oats bin.

Dan McEvoy, an employee of the Wing Seed Company at Mechanicsburg, Ohio, was painfully injured on December 28. He was unloading a car of grain when the heavily loaded truck used for hauling slipped and, striking the young man, crushed his limbs above the knees. No bones were broken, but he was seriously bruised.

A. J. Denton of Nebraska City, Neb., head of the Denton-Kuhn Grain Company, Kansas City, Mo., was instantly killed near Dorchester, Neb., when an automobile he was driving overturned. He was alone at the time of the accident and it is not known just how his death occurred. He was about 40 years of age and leaves a wife.

The Southern Elevator, the property of the Botsford & Jenks Elevator Company, located about a mile from East St. Louis, Ill., was destroyed by fire on December 22 and the loss was estimated at over \$100,000. The house was a frame structure covered with corrugated iron and was located on land owned by the Southern Railway. Twenty box cars loaded with lumber and valued at \$90,000 stood on a siding and were also consumed. The ground in the vicinity of the elevator is badly broken and it is

said that the fire companies were handicapped in approaching the plant.

The elevator of the Jackson Center Flour Mill at Jackson Center, Ohio, was included in the destruction of that plant by fire recently. It was filled with grain and the estimated loss on the entire plant was \$40,000 with insurance amounting to \$8,000. As soon as the insurance is adjusted Kirby Threlkeld, the owner, plans to rebuild.

The elevator at Bayard, Iowa, owned by the Western Elevator Company was burned recently, entailing a loss of \$10,000. The house was nearly filled with grain and a car of oats and two other cars were also consumed. The flames started from some unknown cause and when discovered the building was a mass of fire. There was partial insurance.

The Star Elevator and the plant of the Wycliffe Supply Company at Wycliffe, Ohio, were completely consumed by fire on December 15. The loss was estimated at \$15,000 and this included seven box cars, two loaded cars of coal, about \$10,000 worth of builders' supplies, flour, feed and grain. P. H. Honeywell and H. H. Reeder were proprietors of the elevator.

Fire which started at 5:30 p. m., on December 25 in a two-story brick storage barn at Kansas City, Mo., destroyed 350 tons of hay valued at \$6,000 and gutted the building, making a total loss of about \$11,000. It is believed that a spark from a passing switch engine started the blaze. The hay was the property of the C. D. Williams Hay Company and the loss is covered by insurance.

Carl Boepple, a salesman for the grain and feed firm of the Donmeyer-Gardner Company at Cleveland, Ohio, recently committed suicide in a hotel at Elyria, Ohio. He is believed to have embezzled from his employers and his death is said to have been due to despondency over a shortage in his accounts. Mr. Boepple was 32 years of age and had been employed by the company for six years.

A. E. Fenton, a well known elevator man, was instantly killed by a shunting engine near his elevator in the Canadian Pacific yards at Fort William, Ont., on December 19. Mr. Fenton had climbed to the top of a freight car which was being shunted into his siding, in order to signal the engineer, when a sudden jar threw him to the ground and he rolled under the wheels of the car and was decapitated. He was very popular in the business circles of Fort William and had been in business on his own account for the last two years. He was about 36 years of age and is survived by a wife.

Fire caused by a hot journal on a grain distributor destroyed the "D" elevator of the Albert Dickinson Company, seed merchants, at Minneapolis on December 21. The loss was estimated at over \$100,000. An adjoining warehouse was also consumed. The contents of the buildings were estimated at 150,000 pounds of pop-corn, 250,000 pounds of seed field corn, 10,000 pounds of mustard seed and 50,000 pounds of navy beans. The elevator was a six-story brick building and the warehouse was two stories in height. A. Johnson, night watchman, was on the fifth floor at the time the fire broke out and narrowly escaped death.

The three upper floors of the four-story building at Hartford, Conn., occupied by Smith, Northam & Co., grain and feed dealers, was gutted by fire recently, causing a loss on the building and contents estimated at about \$30,000. The firm deals extensively in hay, flour, feed and grain and the entire stock on hand was practically ruined, although the books and records of the company were unharmed. The fire was discovered in the rear of the third floor of the building and had evidently been burning for some time when discovered. The building, which is owned by C. H. Northam, was built nearly 75 years ago and the recent fire is said to be the first of any consequence that has ever occurred in it. There was insurance amounting to more than \$15,000 on the building and stock.

Henry Dykema, aged 30, a teamster, was fatally crushed in the cogs of a large water wheel in the basement of the Grand Rapids Grain and Milling Company at Grand Rapids, Mich., recently. The man had been called into the basement by Andrew Watson, the head miller, who wanted assistance in releasing the gears and starting the mill. The beveled rollers were held stationary by a small timber wedged between them. Dykema withdrew the stick and stepped back but in some way lost his balance, and plunging forward, fell onto the pinion gear, and was wrapped between that and the core gear as they slowly gathered momentum. In the meantime, Watson stood a few feet to one side with a pole wedged in a large pulley, prepared to withdraw it gradually. He was powerless to stop the pinion gear and rushed out for help, but it soon became evident that the victim could only be released by freeing the flume of water. This was accomplished by Fred Peabody, manager of the firm, who lowered the gates. The body was then removed after having been in the clutch of the gears for 35 minutes.

OBITUARY

Reuben Hoffman, formerly manager on the Chicago Board of Trade for Armour & Co., recently passed away at Springfield, Ill.

Benjamin H. Behrends, grain dealer, supervisor and banker, died at Hartsburg, Ill., recently, following an illness from diphtheria. He was 55 years of age.

D. P. Wigley, formerly engaged in the grain, flour and feed business at Racine, Wis., passed away on December 14, at St. Luke's Hospital in that city, following a long illness.

James Fleming, aged 70 years, passed away at his home in Buffalo, N. Y. He had been employed in elevators for many years and had perfected some of the machinery now used in elevators.

William F. McCracken, who during the past 19 years has been employed by the Chicago Board of Trade as a statistic board marker, died at his home in Chicago after an illness of several months.

O. H. Judkins, who has been a salesman for the Nordyke & Marmon Company of Indianapolis for 20 years, died recently at his home in that city, aged 70 years. He was a veteran of the Civil War.

Robert Nelson died suddenly at his home in Winnipeg, Can., aged 82 years. He went to Manitoba a third of a century ago from Barrie, Ont., where he had been engaged in the grain and lumber business.

James R. Cowing, who has been prominently identified with the grain trade in New York City for many years, died recently. He had been a cashier for the grain commission house of David Dows & Co. for several years.

J. B. Dutch, a former member and one of the officials of the Chicago Board of Trade, died on December 29. He was one of the members of Colonel I. P. Rumsey's Board of Trade Battery, which has lost three members by death recently.

Augustus Talbot, grain broker, suddenly died at his home in Flushing, N. Y., on January 2, after a brief illness from heart disease. Mr. Talbot was 66 years of age and was born in Manhattan. He is survived by his widow and two daughters.

George E. Perkins recently died at Hartford, Conn., where he had conducted a grain and grocery business for 40 years. He was born in 1837 at Glastonbury, Conn., and moved to Hartford when he was nine years of age. His wife, two daughters and a brother survive him.

Milo Bashare, aged 77 years, pioneer grain merchant, died at his home in Toledo, Ohio, on January 5, after a week's illness of congestion of the lungs. He had been a resident of Toledo for 55 years, having engaged in the grain business in 1860 with J. H. Detwiler under the firm name of Detwiler & Bashare.

John H. Kinnaird died at Sts. Mary and Elizabeth Hospital in Louisville, Ky., on December 16, following an illness from pneumonia. He was in his eightieth year and had been engaged in the tobacco business for many years. At one time he conducted a grain business in Iowa. Two sons, one daughter and a brother survive him.

Peter Keil, aged 83, one of the incorporators and first vice-president of the Pittsburgh Grain and Flour Exchange, died at his home in Pittsburgh, Pa., on December 28. He was in the banking and steel business for many years after going to that city as a young man, and later became interested in the grain and commission business. His widow and one son survive.

Frederick Horton, a veteran operator on the Chicago Board of Trade, passed away recently on the ranch of W. H. Bartlett near Trinidad, Colo., where he had been a visitor. Mr. Horton had been a broker for many years but in recent years he had suffered poor health. W. H. Bartlett of the Board of Trade firm of Bartlett, Frazier & Co., was on the ranch at the time of Mr. Horton's death.

Henry Schnelbach, aged 82, grain merchant, died at his home in Pittsburgh, Pa., on December 15. During the latter part of the war he was a member of a regiment of Pennsylvania Reserves but he never saw actual service. In 1865 he opened a hay and grain store in Pittsburgh and continued in that business for several years, losing heavily in the railroad riots of 1877. Later he opened a hay and feed store and continued actively in business until a few months ago, when he was stricken with paralysis. His son, George A. Schnelbach, succeeded as head of the business. The deceased assisted in organizing the Pittsburgh Grain and Flour Exchange and is said to have been the oldest member on the

Exchange. He is survived by eight daughters and one son.

E. A. Miller suddenly died at his home in Packwood, Iowa, while reading after supper. He had not been ill at all previous to the attack. He operated the elevator at Packwood. He had been a soldier in the 25th Iowa, having enlisted at the age of 18 years at Burlington, Iowa, in Company D.

Charles Mahon passed away at his home near Bryon, Ohio, on January 2, at the age of 81 years. Mr. Mahon was a pioneer in Hardin County, where he was engaged in business from 1862 until about 1900, when he removed to Hancock County, where he was engaged in mercantile pursuits. From 1862 until 1890 he, with his brothers, Isaac and James, manufactured corn cultivators and other implements at Dunkirk, Ohio. He also was engaged in the grain and lumber business at that place. He leaves a wife, two sons and seven brothers.

Robert Forsythe, aged 83 years, died at his home in Centreville, R. I., on December 31, after a lingering illness. Mr. Forsythe was born in Ireland in 1830. He came to this country in 1847, settling in Connecticut, where he conducted a grain business for a short time. Later he removed to Massachusetts, and in 1883 he went to Centreville, where he engaged in the hay, grain, coal and wood business, of which he was the sole owner until his death. He was married three times and his third wife survives him, together with four grandchildren.

James B. Canby, former president of the Philadelphia Commercial Exchange, died on December 27, at a sanatorium at Westport, N. Y., where he had been for several months in the hope of regaining his health. He was past 70 years of age. Mr. Canby was born in Delaware, where he lived for many years and was identified with the milling industry. He was a member of the grain and flour firm of Warr & Canby at Philadelphia. He was a Mason and a member of the Sons of Delaware. A more complete sketch of his life will be found elsewhere in this issue.

Llewellyn A. Cobb, one of the oldest members of the Minneapolis Chamber of Commerce, died at his home in that city on January 1, at the age of 59 years. He had been failing in health since last spring but had attended to his duties until about 10 days before his death. He had been a member of the chamber for more than 26 years, having been engaged in the grain business for many years. He was born in St. Anthony in 1853 and removed to Hastings, Minn., in 1864, where he began his career as a grain merchant. In 1886 he moved to Minneapolis and founded the company of L. A. Cobb. For the last two years he had been connected with J. K. Elliott & Co. He is survived by his wife and two sons.

Emanuel Steinhardt died suddenly at his home in New Orleans on December 28, from an attack of heart trouble. Mr. Steinhardt was a bachelor and was 60 years of age. He came to America when he was 20 years old and engaged in business in Iowa. Later, he went to Martin's Station, Ala., which place he virtually founded, and conducted a general store and plantation. About 35 years ago he went to New Orleans and founded the firm of Steinhardt & Co., in partnership with his brother, Simon. The firm deals largely in exporting grain and feed stuffs and has a branch in Hamburg, Germany, under the same name. Mr. Steinhardt was president of the Columbia Cotton Oil Manufacturing Company and he was extensively interested in the banana importing business and in other enterprises. He is survived by two brothers and a sister.

Nicholas Tiedeman, 70 years old, president of the Tiedeman Elevator Company, died at his home in Sioux City, Iowa, of stomach trouble. Mr. Tiedeman was born in Holstein, Germany, in 1842 and came to this country in 1866. He went to Iowa in 1867 and later settled in Sioux City. He engaged in the hotel business in 1874 and after disposing of that entered the grocery business in which he continued until 1903. While conducting the grocery business, Mr. Tiedeman dealt to some extent in grain and after 1902 he became quite extensively engaged in that business. With his two sons he organized the Tiedeman Elevator Company, which operates a line of elevators in Iowa with headquarters at Fonda. He disposed of his grain interests to his sons about five years ago. He had been active in civic affairs and was elected an alderman in 1881. He was a member of the German Lutheran church. He is survived by his widow and two sons.

CROP REPORTS

FINAL CROP ESTIMATE

The final estimates of the Crop Reporting Board of the Bureau of Statistics, based on the reports of the correspondents and agents of the bureau, indicate the acreage, production, and value (based on prices paid to farmers on December 1) of important farm crops of the United States in 1912, 1911 and 1910, to have been approximately as follows:

Crop.	Acreage.	Production.	Farm value,
	Acres.	Bushels.	Dec. 1.
Corn:			Dollars.
1912	107,083,000	3,124,746,000	1,520,454,000
1911	105,825,000	2,531,488,000	1,565,258,000
1910	104,035,000	2,886,260,000	1,384,817,000
Winter wheat:			
1912	26,571,000	399,919,000	223,572,000
1911	29,162,000	430,656,000	279,151,000
1910	27,329,000	434,142,000	382,318,000
Spring wheat:			
1912	19,243,000	330,348,000	231,708,000
1911	20,381,000	190,682,000	163,912,000
1910	18,352,000	200,979,000	178,733,000
All wheat:			
1912	45,814,000	730,267,000	555,280,000
1911	49,543,000	621,338,000	543,063,000
1910	45,681,000	635,121,000	561,051,000
Oats:			
1912	37,917,000	1,418,337,000	452,469,000
1911	37,763,000	922,298,000	414,663,000
1910	37,548,000	1,186,341,000	408,388,000
Barley:			
1912	7,530,000	223,824,000	112,957,000
1911	7,627,000	160,240,000	139,182,000
1910	7,743,000	173,832,000	190,426,000
Rye:			
1912	2,117,000	35,664,000	23,636,000
1911	2,127,000	33,119,000	27,557,000
1910	2,185,000	34,897,000	24,953,000
Buckwheat:			
1912	841,000	19,249,000	12,720,000
1911	833,000	17,549,000	12,735,000
1910	860,000	17,598,000	11,636,000
Flaxseed:			
1912	2,851,000	28,073,000	32,202,000
1911	2,757,000	19,370,000	35,272,000
1910	2,467,000	12,718,000	29,472,000
Rice:			
1912	772,800	25,054,000	23,423,000
1911	696,300	22,934,000	18,274,000
1910	722,800	24,510,000	16,624,000
Hay:			
1912	49,530,000	72,691,000	856,695,000
1911	48,240,000	54,918,000	784,926,000
1910	51,015,000	69,378,000	842,252,000

The corn in farmers' hands in Oklahoma is reported to be 59%, compared with 17 a year ago, and oats are 37, as against 30 last year.

In South Dakota various estimates place an average of 25 to 30 per cent of the total grain crop still in the farmers' hands, the remainder having been marketed.

The average yield of oats in the state of Wisconsin is said to be 42 bushels per acre, while corn runs from 38 bushels in the southern part to 30 bushels in the northern section.

The Missouri corn crop is now over 72 per cent in the crib, the season having been a favorable one. The quality is reported as excellent, being 87 for the state, with a yield per acre of 31.9 bushels.

Secretary George A. Wells of the Iowa Grain Dealers' Association estimates the corn crop of Iowa to be 453,000,000 bushels, of which 45,000,000 bushels are soft corn. The highest previous yield was 388,000,000 bushels in 1906.

According to reports the acreage of corn to be sown next year in the section surrounding Lewiston, Idaho, will be increased approximately 50 per cent. The brilliant success realized this year in growing this product on fallow lands has encouraged the seeding of larger areas.

The Ohio corn crop for 1912 was the largest in point of yield per acre since 1906, and the total yield was the largest since 1900. Figures given out show that the average production this year was 39.8 bushels of shelled corn per acre, and the total yield for 1912 was 127,868,844 bushels.

The total crop of corn in the seven surplus corn producing states of Ohio, Indiana, Illinois, Iowa, Missouri, Kansas and Nebraska is figured at 1,750,000 bushels. It is said that the crop has been overestimated in Missouri, Kansas and Nebraska by the government report, but in the other four states the yield is bountiful.

A cablegram dated December 28, 1912, from the International Institute of Agriculture, Rome, Italy, has been received by the United States Department of Agriculture giving the following information: In Argentina the estimated production this season of wheat is 235,161,000 bushels; oats, 115,882,000 bushels; flaxseed, 51,180,000 bushels.

Texas more than doubled its corn production this year, the total yield for 1912 being 153,300,000 bushels, as compared with 69,350,000 last year. In the matter of corn growing farmers in Texas have also greatly improved upon their methods and the average yield per acre was several bushels more this year than last. There promises to be a large increase in the corn acreage also next year.

PERSONAL

L. Parkhurst of Virginia, Ill., will buy grain at Dawson, Ill.

Andrew Boehn will manage the Farmers' Equity Elevator at Regent, N. D.

Lester Wilson has accepted a position with the Neola Elevator Company at Perry, Iowa.

Clifford Meyer has resigned his position with the Occident Elevator Company at Mott, N. D.

William Jackson has succeeded Ed. Lashier as manager of the Farmers' Elevator at Early, Iowa.

James Snyder of Prentiss, Ohio, has taken charge of the Southworth-Rice Elevator at Deshler, Ohio.

Seth Warrick has been engaged as buyer for the new Farmers' Elevator at Fogarty, near Lincoln, Ill.

Levi T. Peterson, assisted by Emil Aus, is buying grain for the Giebink Elevator at Hastings, Minn.

John F. Beatty has taken charge of the elevator of the Hunting Grain Company at Blooming Prairie, Minn.

Thomas Hoadley now has possession of the grain business at Stark, Ill., formerly conducted by Scott & Hoadley.

Dixon Cotherman has been succeeded as manager of the elevator at Dakota, Ill., by a Mr. Shippy of Freeport, Ill.

Aubrey Dale, a grain dealer at Crescent City, Ill., married Miss Ruth Stokes of Kankakee, Ill., on December 18.

G. J. Gibbs, secretary of the Texas Grain Dealers' Association, who has been seriously ill for several weeks, is improving.

A. C. Anderson, manager of the elevator at Hope, Minn., and Miss Elizabeth Kuchenbecker were married on December 31.

W. A. Moses, of the Moses Bros. Grain Company, Kansas City, Mo., is spending the winter in California with his family.

H. G. Anderson, a prominent grain dealer of Buffalo, N. Y., has been ill for several weeks with pneumonia, but is now improving.

W. E. Heathcote of Cass Lake, Minn., has succeeded Charles Schneider as manager of the Farmers' Elevator at Breckenridge, Minn.

P. Morrissey has resigned his position with the Farmers' Elevator Company at Alta, Iowa, and he has been succeeded by Thomas Scambler.

O. F. Oleson, of the Red Star Mill & Elevator Company, Wichita, Kan., recently made a trip to the West Indies in the interest of his firm.

Frank Bartley of Midland City, Ill., has removed to Hallsville, Ill., where he has accepted a position as manager of the Hallsville Grain Company.

Theodore Reynolds, salesman for the J. B. Rice Seed Company of Cambridge, N. Y., married Miss Cora B. Irwin at East Greenwich, N. Y., on December 26.

W. R. Goudy has been appointed manager of the Farmers' Elevator at Seaforth, Minn., to succeed F. J. Hassenstab, who has removed to Redwood Falls, Minn.

Theo. J. Terhurne has resigned his position as general manager of the Western Elevator and Grain Company at Lewistown, Mont., to attend to other business interests.

James Donaldson, who has been managing an elevator at Herman, Minn., has removed to Beach, N. D., to accept a similar position with the Cargill Elevator Company.

C. F. Culver, who has been buying grain for the Duluth Elevator Company at Ardoch, N. D., has removed to Aurora, S. D., where he will be engaged in the same business.

W. H. Graham, who has been manager of the Farmers' Elevator Company at Larrabee, Iowa, for the past three years has resigned his position to accept a similar one in Illinois.

James R. Godman, a prominent Chicago Board of Trade salesman, connected with the Western Elevator Company, has suffered a collapse and is now at a sanitarium seeking complete rest.

The late William Hereley, former hay and grain dealer at Chicago, left legacies to the pastors of three churches asking each "out of his charity to say as many masses for the repose of my soul as he may deem proper therefor." The will also places \$500 at the disposal of the widow, it is said, for the purpose of having masses read in other church-

es. The widow was given the family residence and the son inherited the father's membership on the Board of Trade, while the remainder of the estate will be held in trust.

F. W. Strong of Urbana, Ill., secretary of the Illinois Grain Dealers' Association, was the guest of C. E. Balsley at a luncheon given by the Commercial Association at Springfield, Ill., recently.

T. H. Kelly, manager of the Platte Valley Milling Company, Gothenburg, Neb., will remove to St. Anthony, Idaho, where he will have charge of a mill and the supervision of six elevators in that vicinity.

W. A. Galbraith has disposed of his flour and feed business at Fonda, Iowa, to V. W. Miller, and he has removed to Oyens, Iowa, where he will take charge of an elevator for the Farmers' Co-operative Company.

P. C. Allen, manager of the Farmers' Grain and Coal Company at Green Valley, Ill., for six years, has removed to Ransom, Ill., to accept a similar position. He will be succeeded by a Mr. Slick of Lincoln, Ill.

Charles Marx has resigned as manager of the Farmers' Elevator Company at Mazeppa, Minn., and a Mr. Miller who has been employed in the Pine Island Farmers' Elevator at Pine Island, Minn., will succeed him.

Irving C. Lyman, president of the Lyman Grain Company at Milwaukee, Wis., was slightly burned about the hands and face on December 31, by an explosion of gasoline in a garage, where the tank of his automobile was being filled.

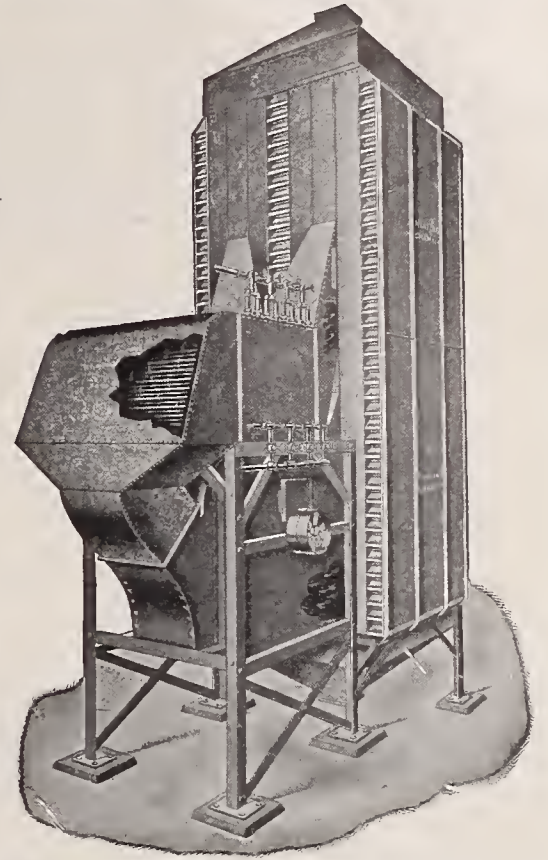
C. J. Slubicki, who has been connected with the Childress Grain and Elevator Company at Temple, Texas, for the past three years, has disposed of his interests in the firm and will be manager of a new company which will be known as the Temple Grain Company.

L. H. Harrod, who conducts a grain business at Wichita, Kan., under the name of Harrod & Company, has mysteriously disappeared. He left Wichita on December 23, stating that he would make a business trip to southwestern Kansas and would return in two or three days. Several grain firms had filed claims against Harrod & Company for unfilled orders, it is said, but aside from that the company's affairs were not seriously involved. Mr. Harrod has been engaged in the grain business at Wichita for about two years, and at one time was connected with J. R. Harold under the name of the Harold-Harrod Grain Company.

TOP PRICES FOR DURUM WHEAT

It is extremely interesting to note that the present prices for durum wheat grown in this country are higher than ever before. It will be remembered that durum or macaroni wheat was introduced to this country by the Secretary of Agriculture in 1898. It came from the dry regions of southeastern Russia and was introduced as a crop probably adapted to successful cultivation on the semi-arid plains of the West. The total acreage in this country has advanced rapidly until two or three million acres are grown annually. Exact figures on production are difficult to give because complete statistics on this crop, separate from the other classes of wheat have been taken but once, namely in 1899. The states of North Dakota, South Dakota and Minnesota are the leading producers, while Nebraska, Kansas, Colorado, Wyoming, and Montana plant smaller areas.

When this wheat first began to appear on the market, a considerable prejudice against it developed on the part of the milling trade and the price paid for it was as much as 15 cents a bushel lower than for other wheat of a similar quality. This difference in price has been gradually decreasing until for the last three or four weeks, highest cash prices paid daily for durum wheat on the Duluth and Minneapolis markets have been equal to or as much as $\frac{5}{8}$ to $\frac{7}{8}$ cents in advance of those paid for No. 1 Northern, which is the standard and usually the highest priced wheat on these markets. The present comparatively high prices of the durum wheat are in spite of a normal production of about 40,000,000 bushels. It is probable that a constantly increasing use of the durum flour in the making of bread, either alone or in combination with common wheat flour, together with the inability of the Mediterranean markets to obtain durum wheats from Russia and the Balkan States at present, are responsible for the record prices.



The Hess Ideal Drier and Cooler

No. 3. Price \$900.00 f. o. b. Chicago.
Capacity a-car-a-day.

Horsepower: for fan, 6 h. p. Steam
for coils, 15 h. p. Shipment
within 24 hours.

This is the size for country elevators, mills, etc. We have eight other sizes ranging up to the big kind for seaboard terminal export elevators.

Of all winters, this winter threatens the heaviest losses known, to grain men who lack the protection of a Hess Grain Drier.

The chaffy, damp corn, the huge crop of it, the open weather, and, particularly, the certain shortage of cars, all conspire against the handling and storage of grain, unprotected.

The Hess Drier insures you against loss. If your corn heats, blow it with cold air or dry it with warm air, both of which may be done with the Hess Drier. It will hold the condition of your grain as long as you own it and it will improve in quality instead of deteriorating. You can sleep nights without visions of mahogany.

Incidentally, there's work for the drier, and a good profit, in buying damp grain and raising the grade. The Hess Drier does it at a nominal expense.

Hess Driers dry any kind of grain or seed. In Michigan the bean growing section is full of them, drying beans. Better post up and get ready before you actually need the machine.

Free Booklet.

Hess Warming & Ventilating Co.

910 Tacoma Bldg., CHICAGO

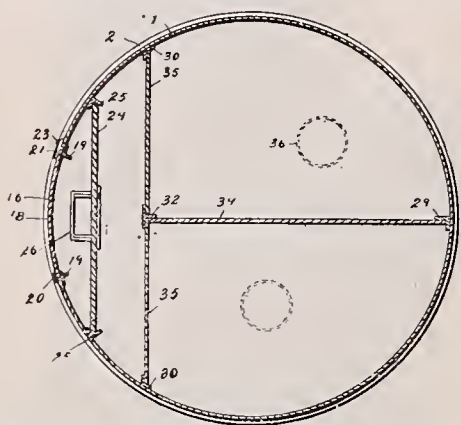
Makers of Hess Improved, Brown-Duvel
Moisture Testers. See page 360.

GRAIN TRADE PATENTS

Issued on December 10, 1912

Metal Grain Bin or Crib.—Buckner F. Freeland, Middlebury, Ind. Filed March 12, 1910. No. 1,046,456. See cut.

Claim.—A combination with sheet metal wall, having a door opening therein; a sheet metal door fitted into said opening; angle iron top and bottom rings for said door arranged with their angles facing

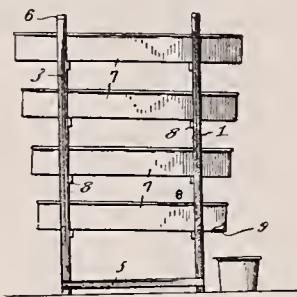


outwardly and their vertical legs within said wall; a pair of casing strips secured to the said wall along the edges of said door and to the vertical legs of said top and bottom rings, said casing strips being arranged to project beyond the edges of the door opening to provide door jambs, said door being hinged to one of said casing strips.

Conveyor.—Hugo Velten, Milan, Italy. Filed Feb. 15, 1909. No. 1,046,511.

Grain Sprouting Device.—Henry S. Chapin, Bowling Green, Ohio. Filed Apr. 5, 1912. No. 1,046,971. See cut.

Claim.—A grain sprouting device comprising a plurality of pans, and a rack for supporting the



pans with an inclination both laterally and longitudinally, said pans having apertures in their lowest corners.

Grain Car Door.—Stewart A. Miner, Dauphin, Manitoba, Canada. Filed Oct. 2, 1909. Renewed Nov. 2, 1911. No. 1,047,131.

Issued on December 17, 1912

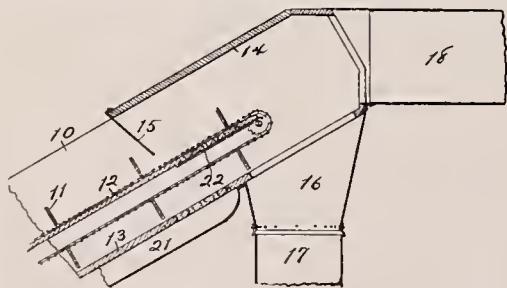
Device for Spouting Grain.—John Laing Weller, St. Catharines, Ontario, Canada. Filed Nov. 21, 1911. No. 1,047,866.

Issued on December 24, 1912

Door for Grain Cars.—Edward E. Josef, Buffalo, N. Y. Filed Sept. 27, 1911. No. 1,047,947.

Cleaner Attachment for Grain Elevators.—Jesse A. Nelson, Ellsworth, Iowa. Filed Mar. 2, 1912. No. 1,048,091. See cut.

Claim.—The combination of a grain elevator having a hood and perforated bottoms beneath said hood, an elevator traveling on said upper bottom



and extending within said hood, spouts leading from said hood at angles to each other, and a blast fan acting through said perforated bottoms into said hood.

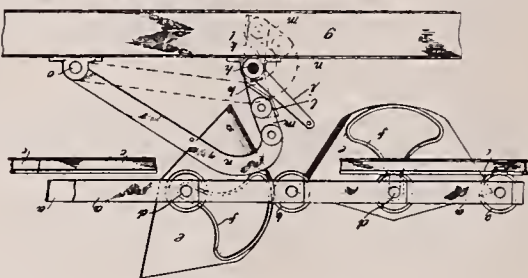
Separator.—Henry P. DeZetter, Byron, N. Y. Filed May 11, 1912. No. 1,048,052

Issued on December 31, 1912

Conveyor.—Charles W. Hunt, New York City; Katharine H. Hunt, Charles Wallace Hunt, and George S. Humphrey, executors of said Charles W. Hunt, deceased. Filed Dec. 30, 1910. No. 1,048,834. See cut.

Claim.—A conveyor, which comprises chains and dumping buckets mounted thereon and having dumping flanges, of a frame, a dumping bar pivoted at one end upon the frame, a shaft mounted on the frame and having a crank arm, a link connecting

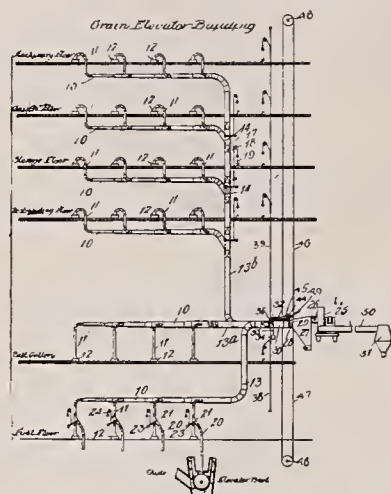
the crank arm with the dumping bar, said arm and link constituting a toggle between the frame



and the dumping bar and means to limit the movement of the crank arm.

Dust Collecting System.—William E. Allington, Saginaw, Mich. Filed June 22, 1906. No. 1,048,477. See cut.

Claim.—A dust collecting system including a fan, leads extending to different areas, each adapted to supply the fan to its normal capacity, means for effecting communication between the fan and any

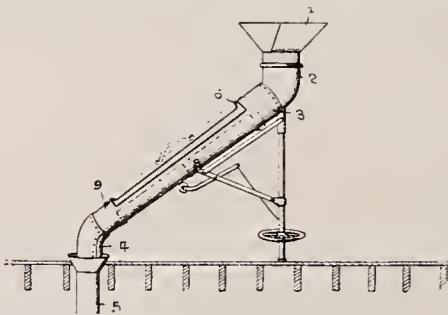


selected lead, operating means therefor extending to and operable from any area to effect communication between the lead for said area and the fan, a locking device operable from any area to maintain the valve in adjusted position, and means for automatically restoring the valve to connection with a predetermined lead whenever said locking means is released.

Seed Corn Box.—Orra L. Dunkelbarger, Nevada, Iowa. Filed Sept. 9, 1912. No. 1,049,293.

Grain Spout.—Axel W. Erickson, Hawick, Minn. Filed Dec. 20, 1911. No. 1,048,513. See cut.

Claim.—An inclined cylindrical grain spout with an opening and having in combination with it a closure for the opening consisting of a curved body provided with circular hands movably embracing the cylindrical spout, said closure having a notch



in an end thereof, a lug on the spout engaged by the said notch and held in engagement therewith by gravity for preventing rotation of the closure on the spout, and a handle on the closure whereby the closure may be moved longitudinally and the notch may be disengaged from the lug so that the closure may be rotated upon the surface of the spout for uncovering said opening.

Issued on January 7, 1912

Bag Holder.—John H. Devini, Cleveland, Texas. Filed Feb. 28, 1912. No. 1,049,821.

CORN DISPLACING COTTON IN LOUISIANA

During many generations, the rich bottom lands of Louisiana were planted year after year with cotton. Now after long undisputed sway, "King Cotton" is apparently to be overthrown by corn, for the latter crop is increasing in the state at an enormous rate. The cotton crop began to lose favor when, season after season, the boll weevil came and either destroyed the cotton entirely or cut down the yield below the cost of production. Most of the planters, however, kept on planting cotton exclusively until the repeated failures of their crops, due to the boll weevil, brought them to the verge of bankruptcy.

In the meantime, however, corn had not been any more successful. This was because corn was only planted in the poorest and thinnest spots and with any seed that was available. The corn was cultivated once or twice and then all the teams and men

were kept at work on the cotton, the cornfields growing up with grass and weeds. The corn averaged from 10 to 20 bushels per acre, and the planters became convinced that the climate barred profitable corn raising.

About two years ago, however, starting with the organization of boys' corn clubs, conditions soon became changed and the scientific cultivation of corn was tried with a great deal of success. Then in addition a new kind of corn was introduced. The old fashioned corn of Louisiana is soft and is badly damaged in the crib by the grain weevil, this pest often making it unfit for feed. Recently a semi-flint corn has been developed that is pure bred, yields more than the soft corn, and is practically weevil proof. This hard corn, it is said, has only 12 per cent moisture at husking time, and is so dry when picked that it is ready immediately for exportation to European markets. There has been, therefore, a tremendous increase in the corn crop of Louisiana during the past two years.

With regard to the corn produced in Louisiana, W. L. Richeson, chief of the bureau of grain inspection, New Orleans, recently said:

"Our corn is sun-dried, which means that when ready for market it contains only 12 to 15 per cent of moisture. Northern and Western corn at the start contains all the way from 16 to 24 per cent. Dryness is the principal factor in preventing deterioration, and because of its low moisture content, Louisiana corn is highly desirable, especially for export."

"The Louisiana grower prepares his land and plants his seed as early as the latter part of February or early in March, and he can market his crop by October 1, sixty days in advance of the corn movement from the northern and western states. This insures high prices. Corn can also be planted in June and will fully mature before frost."

RECENT SALES OF MOISTURE TESTERS

The following sales of Hess Improved Brown-Duval Moisture Testers are reported by the Hess Warming and Ventilating Company since our last issue: Nye-Schneider-Fowler Company, Omaha, Neb.; Peterson & Son, Anthon, Iowa; Baltimore Chamber of Commerce (two stations), Baltimore, Md.; Brooklyn Lumber and Grain Co., Brooklyn, Iowa; Trans-Mississippi Grain Company, Odebolt, Iowa; Cartersville Supply Company, Cartersville, Iowa; Peter Nelson, Hamlin, Iowa; Farmers Industrial Union, Britt, Iowa; The Wallace Company, Filion, Mich.; Trans-Mississippi Grain Company, Kiron, Iowa; Trans-Mississippi Grain Company, Turin, Iowa; C. Herbert Coy Seed Company, Valley, Neb.; Gruver Farmers Elevator Company, Gruver, Iowa; H. W. Pollock & Co., Bagley, Iowa; Central Elevator Company, Indiana Harbor, Ind.; R. C. Phillips & Company, Priscilla, Ill.; Smith Bros. & Velti & Company, Lake Odessa, Mich.; Grain Inspection Department, Tacoma, Wash.; Eurkea Milling and Elevator Company, Brown City, Mich.; Ithaca Farmers Elevator Company, Ithaca, Mich.; Farmers Elevator Company, Pierson, Iowa; Farmers Elevator Company, Rockwell City, Iowa; J. M. Atherton Distillery, New Haven, Ky.; C. A. Stockmeyer, Caseville, Mich.; Western Elevator Company, Galbraith, Iowa; Newburg Farmers Elevator Company, Newburg, Iowa; Farmers Elevator Company, Fenton, Iowa; Geo. A. French, Storm Lake, Iowa; Geo. A. French, Cherokee, Iowa; Edmonds-Londergan Company, Steen, Minn.; A. A. Truax Grain Company, Mitchell, S. D.; Christian M. Good, Ida Grove, Iowa; Ed. Mann, Calumet, Iowa; Ed. Mann, Gaze, Iowa; Lone Rock Exchange Company, Lone Rock, Iowa; Metcalf & Cannon, Sutherland, Iowa; Wallace & Orr Company, Bay Port, Mich.; Elkton Elevator Company, Elkton, Mich.; Owendale Grain & Lumber Company, Owendale, Mich.; Pigeon Elevator Company, Pigeon, Mich.; Vestaburg Elevator Company, Vestaburg, Mich.; Tripoli Lumber Company, Tripoli, Iowa; Prairieburg Lumber Company, Prairieburg, Iowa; A. W. Savage Lumber Company, Ryan, Iowa; and Coggon, Iowa; Reinbeck Lumber Company, Reinbeck, Iowa; Edmonds-Londergan Co., Matlock, Iowa, and Edna, Iowa; Mazon Farmers Elevator Company, Mazon, Ill.; Renwick Farmers Exchange Company, Renwick, Iowa; National Elevator Company, Port Arthur, Ont., Canada; Hunter Distillery Company, Lair, Ky.; Paris Distilling Co., Paris, Ky.; A. Keller Distributing Company, Cynthia, Ky.; Godden & McDonald, Burt, Iowa; Earling Grain Company, Earling, Iowa; Western Grain Company, Marcus, Iowa; Farmers Elevator Company, Larabee, Iowa; F. H. Hancock, Danbury, Iowa; S. Crumbaugh, Le Roy, Ill.; Farmers Elevator Company, Oyens, Iowa; H. A. Carpenter, Edwardsburg, Mich.; The Wallace Company, Kinde, Mich., and Port Austin, Mich.; Uby Grain Company, Uby, Mich.; Henry W. Carr Company, Saginaw, Mich.; State University of Maine, Orono, Maine; A. Schantz, Mecosta, Mich.; Trans-Mississippi Grain Co., for its stations at Anthon, Iowa, Pierson, Iowa, Early, Iowa, Sargents Bluff, Iowa, Maurice, Iowa, Oto, Iowa, Castana, Iowa, Harlem,

Iowa, Cushing, Iowa, Smithland, Iowa; Western Seed & Irrigation Company, Fremont, Nebr.; Fields & Hedges, Akron, Iowa; H. W. Pollack & Company, Adair, Iowa; Farmers Grain Company, Charlotte, Ill.; W. H. Cook, Delmar, Iowa; James Mohler Elevator Company, Strome, Alta., Canada; James Mohler Elevator Company, O'Haton, Alta., Canada; Wabash Elevator Company, Uniontown, Ky.; J. C. Dewey & Company, Annawan, Ill.

The books of the Farmers' Elevator Company of La Hogue, Ill., were audited recently and it is stated that the company has lost \$14,000 in the last three and a half years. About a year ago a dividend of 10 per cent was declared upon the capital stock of \$18,000, which was paid to the stockholders. This \$1,000 deducted from the shortage makes the amount of the losses \$13,000, which were incurred by speculation on the board of trade, partially to hedge against grain which was stored free, and sold to make room in the company's elevator and granaries.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

HOW TO SELL YOUR ELEVATOR.

If you wish to sell your elevator promptly and quietly, write me, giving all the information. Must be worth the money. JAMES M. MAGUIRE, Campus, Ill.

ELEVATORS FOR SALE

Have a nice lot to select from at prices from \$3,000 up. Write and let me know how much you wish to pay. Am sure I can suit. JAMES M. MAGUIRE, Campus, Ill.

ELEVATOR FOR SALE

Located on M., K. & T. and St. L. & Mo. S. Ry's. New plant throughout. Large country to draw from. For further particulars address T. F. JAMESON, 1407 Spruce St., Coffeyville, Kan.

ADMINISTRATOR SALE

The Burdick Potter Elevator property, located at Fenton, Genesee Co., Mich., consisting of elevator building, brick warehouse, hay barn, coal sheds, also large modern residence and brick store, will be sold at auction to the highest bidder, February 15, 1913, at 10 o'clock a. m. For particulars write A. W. CIMMER, Administrator, Fenton, Mich.

FINE TERMINAL PLANT FOR SALE

Grain Elevator property for sale at Harvey, Ill., on Grand Trunk Railroad. Description: 10 fire-proof storage tanks, capacity 250,000 bushels; bleaching tower; boiler house and boiler; office; motors; machinery; electric switches; concrete foundation for working house, etc. Direct and belt connections with all railroads. Address H. W. ROGERS & BRO., Western Union Bldg., Chicago, Ill.

FLOUR AND FEED MILL FOR SALE

A 50-barrel steam roller mill in good wheat and dairy country. Mill in good condition and equipped with modern machinery. Located in southern Indiana in fine town; good schools and churches. Have fine trade established. Will sell two-story house in connection, if desired. Excellent opportunity for some one. Write for full information. INDIANA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

MACHINERY

FOR SALE

Two 30-horsepower gas engines in No. 1 condition used only a little. Write SMITH BROS., Ridgeway, Pa.

FOR SALE AT A BARGAIN

Two 35-horsepower and one 15-horsepower St. Mary's Gasoline Engines. HENRY F. STUEBE, 2111 College Ave., St. Louis, Mo.

FOR SALE

For isolated lighting plants, 2½ to 100 k.w. steam-electric generating units. MORSE COMPANY, 125 S. Clark St., Chicago, Ill.

FOR SALE

Twenty-five-horsepower Olds Gas or Gasoline Engine. Can be seen running. Price, \$225. ANTI-BORAX COMPOUND CO., Fort Wayne, Ind.

FOR SALE

One 25-horsepower, Otto Gasoline Engine, in good running order. Price, with battery ignition, \$350; magneto ignition, \$375. THOMPSON & SONS MFG. CO., Beloit, Wis.

FOR SALE CHEAP

One 20-horsepower Lambert Engine, one No. 8 Bowsher Mill, 40-foot belt, Apple Dynamo, one 5-horsepower Fairbanks-Morse Engine in fine running order; three 1¼ Holly Carbureters. CHAS. M. HANSON, Minooka, Ill.

FOR SALE

One Monitor Dustless Receiving Separator; nearly new; in first-class order.

One Fairbanks Dormant Warehouse Scale; double brass beam and double iron pillars; capacity 3,000 pounds; in first-class order.

Write for prices and full description. JOHNSON & COMPANY, Goshen, Ind.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

FOR QUICK SALE

An 8,080-acre stock ranch for half its value. For further information, address the owner, A. J. JOHNSON, Merchants' National Bank Bldg., Springfield, Mo.

FOR SALE

Citrus fruit and agricultural land on gulf coast. Healthiest place in Florida. Thirty dollars an acre. Easy terms. Free literature. Investigate. PORT RICHEY COMPANY, Tampa, Florida.

FOR SALE

Irrigated farm, 175 acres, with first-class water right, well improved. Four and one-half miles pig-tight fence. Fifty-five acres alfalfa, balance plowed. Terms easy. E. J. BISHOP, Owner, Mesita, Colo.

CHOLERA PROOF HOGS

I have more than 5,700 swine on my farm and am selling grade Yorkshire, Tamworth, Poland-China and Duroc brood sows, boars and shoats in any quantity at best Buffalo market price for fat Yorkers on day of sale. Sows to farrow soon included. These hogs are not fat, are cholera proof and prolific breeders. Pigs that are six to ten weeks old at \$3 to \$4. ALVAH BROWN'S PIG FARM, Grand Rapids, Mich.

TO EXCHANGE

If you want to exchange your improved farms, improved or unimproved city property, merchandise, hotels, grain elevators, flour mills, automobiles, live stock, horses, or anything along these lines for good, well selected, unimproved farming, grazing or dairying lands, located about 75 miles from St. Paul or Minneapolis, I can get you a good proposition and make you some money. My clients have thousands of acres of land for you to select from. I negotiate deals of any size from 40 acres up. Let me know just what you have to exchange, so I can present to my clients intelligently. Then I will submit you an offer without delay and get you quick results. I neither charge nor pay commissions. GEO. H. DODGE, 911 New York Life Bldg., Minneapolis, Minn.

Grain and Seeds

OATS STRAW WANTED

Wanted, 100 cars oats straw. C. T. HAMILTON, New Castle, Pa.

WANTED FIELD SEEDS

All varieties. Quote with samples. J. OLIVER JOHNSON, Chicago, Ill.

FOR SALE

Alfalfa seeds, highest grades; also red clover and timothy seeds. Write us. C. A. SMURTHWAITE GRAIN & MILLING COMPANY, Salt Lake City, Utah.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

WANTED

We are in the market for full or mixed cars Odebucker, Beardless and Hulless Barley, also Speltz or Emmer. Want nothing except pure, clean stock, free from mixtures and as nearly unbleached as possible. Send samples and state price expected, f. o. b. your track, car lots. RATEKIN'S SEED HOUSE, Shenandoah, Iowa.

1913 The Wagner Letters of 1913

will follow the crop raising season with advance reports. Your attention and business is requested. Correspond. Send for May 1913 wheat and corn circulars.

E. W. WAGNER & CO., 99 Board of Trade, CHICAGO

WANTED, RED CLOVER

**Alsyke, Timothy, Mixed
Alsyke and Timothy, etc.**

Send Samples Stating quality.

THE ADAMS SEED COMPANY, Box 91 Decorah, Iowa

Edward P. McKenna

John A. Rodgers

McKENNA & RODGERS COMMISSION MERCHANTS

Grain and Provisions, Shippers of Corn and Oats

61 Board of Trade, CHICAGO

Consignments given
Special Attention

Phone
Harrison 7228

Orders in Futures
carefully executed

"Ratekin's Seed Corn"

Oldest established and largest wholesale and contract seed corn growers in the United States. Have made this a specialty for over thirty years. We grow all the leading, standard and best varieties of field, Dent, Flint and Sweet sugar corn for wholesale trade. Write or wire us for prices and quotations for immediate or future shipments, also contract prices for 1913, stating probable quantities of different varieties, etc., etc.

Ratekin's Seed House,

Shenandoah, Iowa

GRAIN RECEIVERS

PHILADELPHIA

L. F. MILLER & SONS,
Receivers and Shippers of
GRAIN, FEED, SEEDS, HAY, ETC.
OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA
CONSIGNMENTS SOLICITED. Special attention given to
the handling of CORN AND OATS.
REFERENCES: { Manufacturers' National Bank, Philadelphia, Pa.
Union National Bank, Westminster, Md.

E. E. DELP GRAIN CO.
GRAIN AND FEEDS
453 BOURSE PHILADELPHIA, PA
ELEVATOR, TRANSFER HOUSE AND MILLS:
BOURBON, INDIANA

MILWAUKEE

O. MOHR, Mgr. G. C. HOLSTEIN, Sec'y-Treas.
Mohr-Holstein Commission Co.
29 Chamber of Commerce
MILWAUKEE
Sample Grain a Specialty
BRANCH OFFICES AT CHICAGO AND MINNEAPOLIS

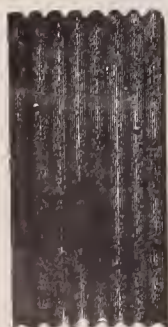
OUR SPECIALTIES:
Malting Barley
Milling and Distilling Rye
FAGG & TAYLOR, Shippers
MILWAUKEE, WIS.

KANSAS CITY

R. J. THRESHER, Pres. L. A. FULLER, Sec'y
THRESHER-FULLER GRAIN CO.
Grain Commission Merchants
CONSIGNMENTS SOLICITED
Grain Bought and Sold for Future Delivery
311-14 Board of Trade KANSAS CITY, Mo.

ROOFING AND SIDING

SYKES STEEL ROOFING CO.
114 W. 19th Place, Chicago



MAKERS OF FIREPROOF WINDOWS
We manufacture all gauges of cor-
rugated iron, either painted or galva-
nized. We make Patent Cap Roofing, Roll
Cap roofing, "V" Crimped Roofing, Metal
Ceilings, etc., etc.

We make a specialty of
**Corrugated Iron and
Metal Roofing
For Grain Elevators**

And take contracts either for material alone or job completed
Write us for prices. We can save you money.

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P. B. & C. C. MILES
Established 1875 Incorporated 1910
PEORIA, ILL.
Handling Grain on Commission
Our Specialty

A. G. TYNG, Jr. D. D. HALL
TYNG, HALL & CO.
Grain and Commission
Merchants
Rooms 33 and 35 Chamber of Commerce
PEORIA, ILLINOIS

C. W. Buckley. Thos. J. Pursley
Buckley, Pursley & Co.
COMMISSION MERCHANTS
GRAIN, HAY AND SEEDS
PEORIA, ILL.
References { First National Bank, Peoria, Ill.
Commercial German National Bank, Peoria, Ill.

W. W. Dewey & Sons
GRAIN COMMISSION
26 Chamber of Commerce, PEORIA, ILL.
Prompt personal attention given to
Consignments and orders for grain.

We Get Continuous Chicago Markets. Private Wires to all Points.
T. A. GRIER & CO.
Grain Shipping and Commission Merchants
We Furnish Bids on Grain to Arrive
and Also Solicit Consignments.
18-22 Chamber of Commerce, PEORIA, ILL.

RUMSEY, MOORE & CO.
GRAIN COMMISSION
Board of Trade Bldg. PEORIA, ILL.

LOUIS MUELLER L. L. GRUSS
MUELLER GRAIN CO.
RECEIVERS and SHIPPERS
GRAIN
We Solicit Your Consignments of Grain and Hay
ROOM 39 CHAMBER OF COMMERCE
PEORIA, ILLINOIS

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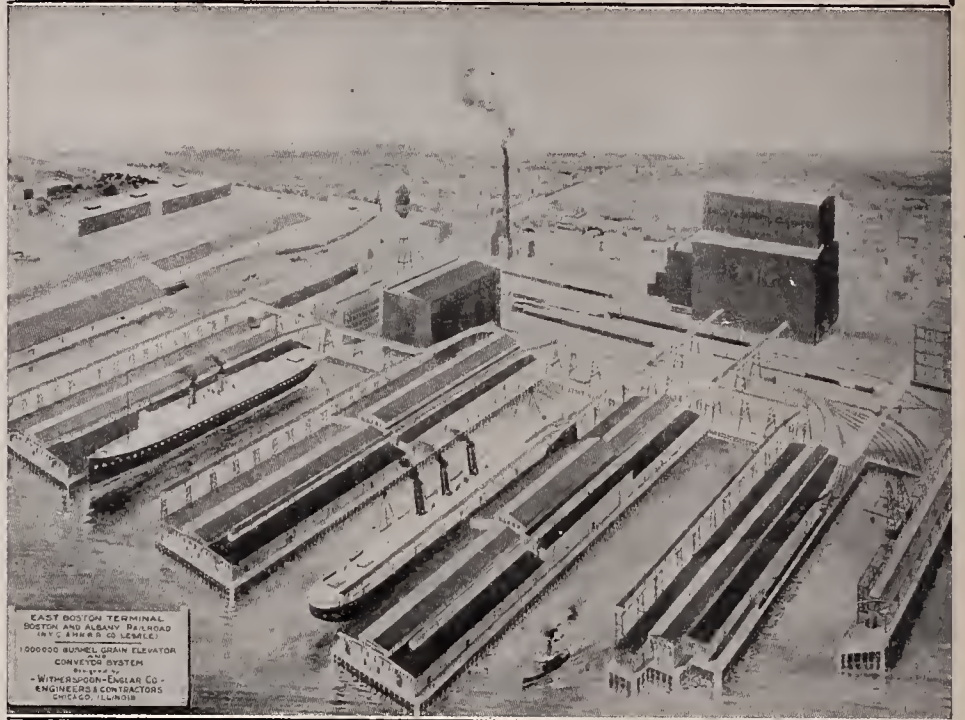


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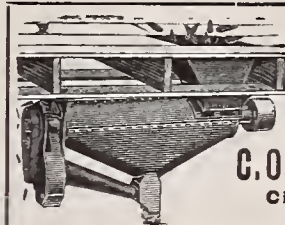
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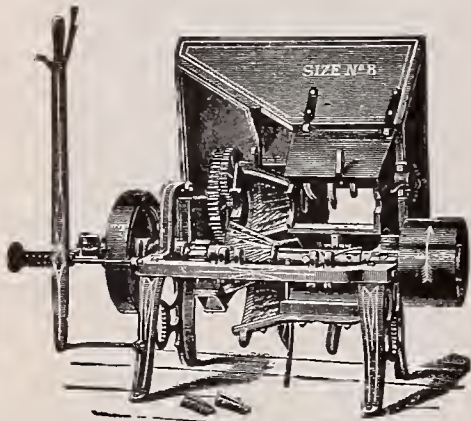
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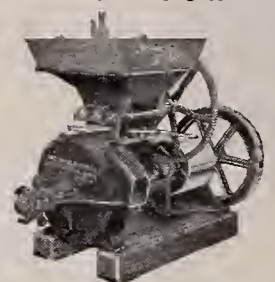
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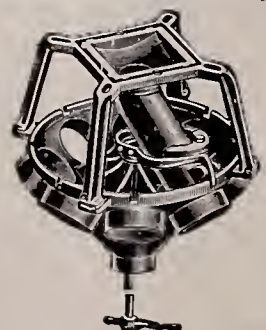
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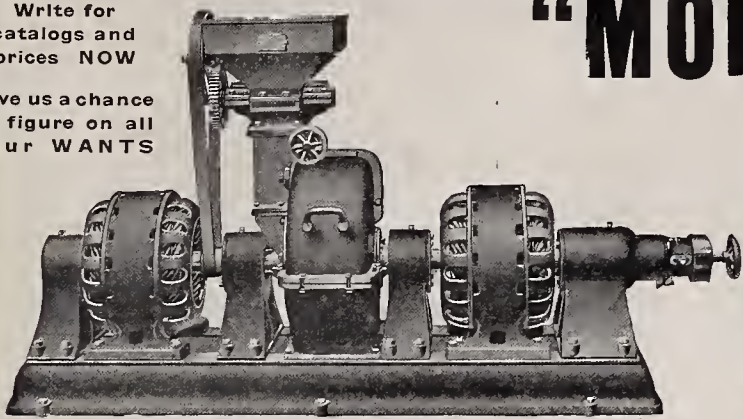
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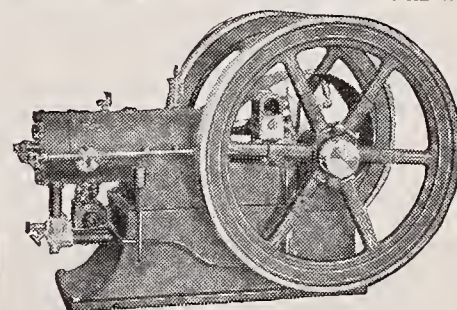
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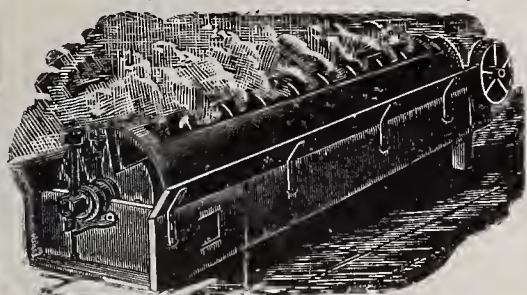
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Dunn, W. P., flour, grain, hay, mill feeds, etc.*
Joseph Gregg & Son, grain and hay brokers.*†

BALTIMORE, MD.

England & Co., Chas., grain and hay receivers.*†
Hax & Co., G. A., grain and hay receivers.*†

BLOOMINGTON, ILL.

Baldwin Grain Co., brokers.
Hasenwinkle Grain Co., grain commission merchants
O'Neill & Gyles, grain brokers.
Slick & Co., L. E., grain receivers and shippers.

BUFFALO, N. Y.

Alder-Stofer Grain Co., grain commission.*
Buffalo Cereal Co., grain.*
Burns Grain Company, grain commission.
Churchill Grain & Seed Co., grain and seeds.*
Harold, A. W., grain merchant.

CHAMPAIGN, ILL.

Sledge, J. P., grain broker.*

CHICAGO, ILL.

Armour Grain Co., grain buyers.*
Bailey & Co., E. W., commission merchants.*
Butz Grain Co., E. G., grain commission.
Canby & Co., C. H., commission merchants.*
Carhart, Code, Harwood Co., grain commission.
Delaney, Frank J., grain commission.
Dickinson Co., Albert, seeds.
Dole & Co., J. H., commission merchants.*
Fraser Co., W. A., grain commission.*
Freeman & Co., Henry H., hay, straw and grain.†
Gerstenberg & Co., grain and seeds.*
Griffin & Company, J. P., grain commission.
Hooper Grain Co., receivers and shippers.*
Hulburd, Warren & Chandler, com. merchants.
Illinois Seed Co., seed merchants.
Kempner Company, Adolph, commission merchants.
Lamson Bros. & Co., commission merchants.*
McDermid & Co., commission merchants.
McKenna & Rodgers, commission merchants.*
Albert Miller & Co., hay and produce.†
Nye & Jenks Grain Co., commission merchants.*
Paynter, H. M., grain commission.
Pope & Eckhardt Co., grain and seeds.*
Rosenbaum Brothers, receivers and shippers.*†
Rumsey & Co., commission merchants.*
Sawyers Grain Co., grain commission.*
Schiffin & Co., Philip H., commission merchants.*
Shaffer & Co., J. C., buyers and shippers.*
Somers, Jones & Co., commission merchants.*
Thayer & Co., C. H., grain and seeds.
Van Ness, Gardiner B., grain commission.*
Vehon & Co., M. L., commission merchants.
Wagner & Co., E. W., receivers and shippers.*
Ware & Leland, grain and seeds.*

CHICAGO, ILL.

Wilson & Co., B. S., grain, seed and provisions.*
Winans & Co., F. E., grain and field seeds.

COLUMBUS, OHIO.

McAlister, Jas. P., & Co., shippers grain and hay.

CRAWFORDSVILLE, IND.

Crabbs-Reynolds-Taylor Co., grain and seeds.*†

CROWLEY, LA.

Lawrence Brothers Co., Ltd., grain, nutriline feed.

DES MOINES, IOWA.

Lockwood Grain Co., B. A., flour and grain dealers.*

DECATUR, ILL.

Baldwin & Co., H. I., grain brokers.*

DETROIT, MICH.

Dumont, Roberts & Co., receivers and shippers.*

FORT WAYNE, IND.

Bash & Co., S., grain and seeds.
Egley-Doan Elevator Co., grain, seeds, hay.*†
Niezer & Co., grain, hay, straw, seeds, coal.*†

GREENVILLE, OHIO.

Grubbs Grain Co., E. A., buyers and shippers.*

HARRISBURG, PA.

Harrisburg Feed and Grain Co., grain and feed.†

INDIANAPOLIS, IND.

Boyd, Bert A., grain commission.*
Mutual Grain Co., grain commission.

JACKSONVILLE, FLA.

Wilson & Parker Co., commission merchants.*†

KANSAS CITY, MO.

Thresher-Fuller Grain Co., grain commission.*

LANCASTER, PA.

Eby & Son, Jonas F., receivers and shippers.†

LIMA, OHIO.

Ward Grain Co., dealers and brokers.*

LOUISVILLE, KY.

Callahan & Sons, receivers and shippers.*
Thomson & Co., W. A., receivers and shippers.

MILWAUKEE, WIS.

Bacon Co., E. P., grain commission merchants.*
Bell & Co., W. M., commission merchants.*
Donahue-Stratton Co., buyers and shippers.*
Fagg & Taylor, shippers.*
Franke Grain Co., receivers and shippers.
Mereness & Potter Co., grain and seeds.*
Mohr-Holstein Commission Co., grain commission.

MINNEAPOLIS, MINN.

McCaull-Dinsmore Co., commission merchants.*
Minneapolis Seed Co., seeds.

NASHVILLE, TENN.

Hale & Sons, J. R., grain, seeds.*

NEW CASTLE, PA.

Hamilton, C. T., hay, straw, grain, millfeed, produce.†

NEW ORLEANS, LA.

Leonhardt & Co., A. F., grain and hay.*†

NEW YORK, N. Y.

American Hay Company, hay.†
Brooklyn Hay & Grain Co., hay, straw and grain.†
Forbell & Co., L. W., commission merchants.*†

NORFOLK, VA.

Cofer & Co., Inc., J. H., grain.*
Cofer, Vernon L., hay, grain, feed.*
LeGrand & Burton, grain and hay brokers.†
Reed & Bro., Inc., D. P., hay, grain, mill feeds.*

OMAHA, NEB.

Cavers Elevator Co., receivers and shippers.*

PEORIA, ILL.

Buckley, Pursley & Co., commission merchants.*
Dewey & Sons, W. W., grain commission.
Feltman, C. H., grain commission.†
Grier & Co., T. A., grain commission.
Miles, P. B. & C. C., grain commission.*†
Mueller Grain Co., receivers and shippers.†
Rumsey, Moore & Co., grain commission.*
Tyng, Hall & Co., grain commission.*

PHILADELPHIA, PA.

Delp Grain Co., E. E., grain and feeds.*†
Lemont & Son, E. K., hay, grain, mill feeds.*†
Miller & Sons, L. F., receivers and shippers.*†
Richardson Bros., grain, flour, mill feeds.*†

PITTSBURG, PA.

Hardman & Heck, hay, grain and feed.†
Heck & Co., W. F., receivers and shippers.†
McCaffrey's Sons Co., Daniel, grain and hay.*†
McCague, R. S., grain and hay.*†
Morgan, H. G., hay and grain.†
Stewart & Geidel, D. G., grain, hay and feed.†

RICHMOND, VA.

Adams Grain & Provision Co., receivers shippers, exporters.*†
Beveridge & Co., S. T., grain, hay, feed, seeds.*†
Richardson, Jr., Co., Inc., W. F., grain and feeds.*

SAGINAW, MICH.

The Henry W. Carr Co., receivers and shippers.*†

SALT LAKE CITY, UTAH.

Smurthwaite Grain & Milling Co., C. A., grain, flour, hay, seeds.

ST. LOUIS, MO.

Elmore-Schultz Grain Co., receivers and shippers.
Mullally Commission Co., John, com. merchants.*†
Picker & Beardsley Com. Co., grain, hay and seeds.*†
Prunty, Chas. E., grain and seeds.

TOLEDO, OHIO.

Devore & Co., H. W., grain dealers.
The Goemann Grain Company, grain merchants.*†
King & Co., C. A., grain and seeds.*
Paddock-Hodge Co., receivers and shippers.*
Raddatz & Co., H. D., grain and seeds.
Southworth & Co., grain and seeds.*†
Wickenhiser & Co., John, grain dealers.
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*Members Grain Dealers' National Association.

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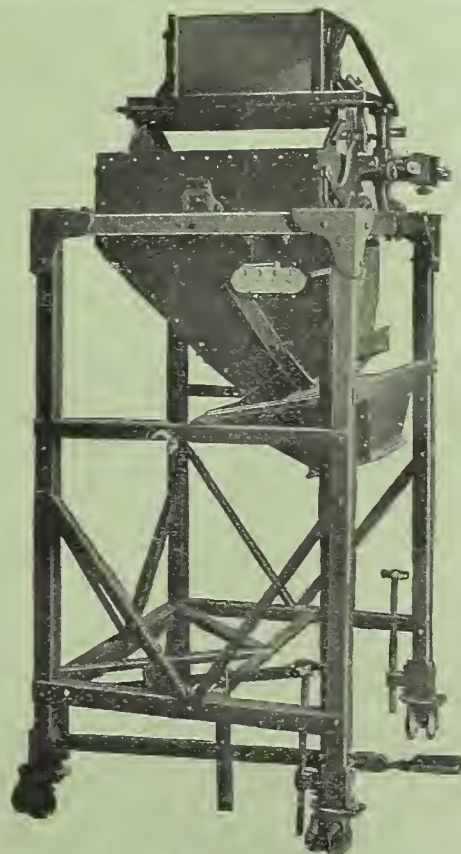
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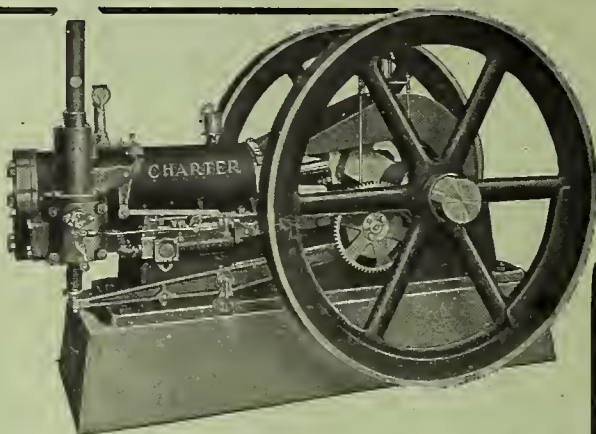
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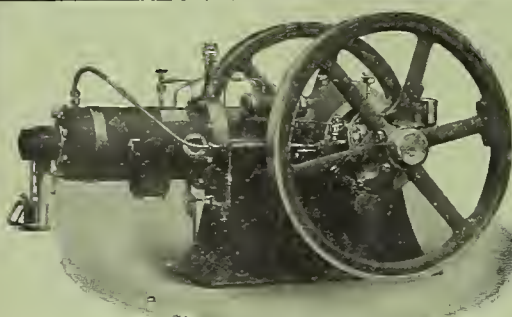
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